

WHO MANUFACTURES THE NOSTRUMS AND PATENT MEDICINES? IN OTHER WORDS WHO MAKES DOPE FOR QUACKERY?

SOME time ago we aroused quite a furore in certain quarters—and the echo is still reverberating throughout the country—by asking the following question: Who manufactures the patent medicines and quack nostrums? In other words, who furnishes quackery with the dope? This question was justified by the fact which is well known in pharmaceutical circles, that the vast majority of the preparations with which the laity is being pestered and poisoned so energetically and so persistently are not as a rule made by the people who are the real owners and promoters. Practically all the proprietors of the fake patent medicines have not the slightest idea of chemistry and manufacturing pharmacy and it would be as impossible for them to make an elegant pill or tablet, to fill a soft capsule, or to make a palatable, compatible mixture as it would be to solve a problem in differential calculus or astronomy.

At the last meeting of the A. M. A. at Boston, Dr. Kebler of Washington, Chief of the Drug Laboratory, Bureau of Chemistry U. S. Dep't of Agriculture, showed that a very large proportion of the nostrum manufacturers (95 per cent perhaps) have no

laboratories of their own, but their remedies are made in the laboratories of the great and supposedly ethical pharmaceutical houses, which are soliciting the business of the doctor,—a business which these houses are at the same time secretly undermining. They say it is "business;" we say it isn't fair. It is a direct incitement to quackery, for we have no doubt that many of those quacks would not go into business at all if they had to construct their own formulas, build their own laboratories, employ chemists, etc. It would be too troublesome and too risky, while the great so-called ethical houses make it very easy and smooth-sailing for them. All the quack has to do is to say for what ailment he wants that particular nostrum to be, and the great houses put their knowledge, experience and facilities at the quack's disposal. They construct his formulas, make the preparations, label them artistically and attractively. In short, everything is done to make quackery attractive, and all the nostrum proprietor has to do is to pay the bill and then to push his dope onto the credulous people.

As a contribution to the discussion of the secret-nostrum question and as essential to its solution, this question must be ans.

wered. Justice can be done in no other way than by telling all the truth. It is incumbent upon the Council of Pharmacy and Chemistry and the *Journal of the A. M. A.* to possess themselves of these facts in their entirety and to let in the light. The inquiries are becoming more and more insistent, and already official action has been taken. For instance, the Section of Pharmacology and Therapeutics at the Boston Meeting, passed a resolution which read in part as follows:

"The Section learns with regret that certain manufacturing pharmacists have practically placed the facilities of their plants at the disposal of venders of some of the worst and vilest nostrums by which the people of the United States have been defrauded. It is obvious that such practices cannot be too severely condemned, especially if the patronage and confidence of the medical profession is to be retained.

The Kansas State Medical Society has also positioned itself, for at its annual meeting in May the following resolution was passed: "Resolved, That manufacturing pharmacists who have engaged in whatever extent in the making of nostrums are hereby requested to abandon such manufacture, either directly for their own trade, or for exploitation by others."

It is up to the doctor to probe farther in this matter. Who is it that is making "cascarets," for instance, or "Carter's pills," "Stuart's dyspepsia tablets," "damiana wafers," "force of life" remedies and a score of other things sold directly to the laity? Do you propose to remain in partnership with the men who make the "patents" and "nostrums?" Do you approve of a business policy that preaches and lobbies for "ethical" preparations with the doctor, while it "borrows" the formulas of men who really originate successful proprietaries,

supplies the druggist with ready-made mixtures for counter prescribing, and solicits (on the q. t.) the immensely lucrative business of men who are selling train load after train load of habit-forming "dope" to the laity—to their harm and your business injury?

These are questions which it is worth your while to consider and by the solution of which it is worth your while to be governed in the conduct of your own business.

We have no desire in any degree to tear down any honest business structure; we would impede the progress of no conscientious man; but we can no longer keep silence on this subject which is of so great importance to the medical profession—that which is the very backbone of quackery and fraud—that which renders their bombastic and soul-and-body-wrecking methods possible.

Let us assume that it is pure thoughtlessness that when the matter is brought to their attention they will stop, but let us keep a weather eye on them to see that they do it, stop and stay stopped, that years of honesty and loyalty to the profession may at least attenuate the injury and disgrace they have caused to the profession.

SOME ANTITOXIN FIGURES.

Herbert D. Pease, the Director of the Antitoxin Laboratory, N. Y. State Department of Health, in a recent address contributed some valuable data on the results of antitoxin as shown by the official statistics. In 4000 cases the deaths numbered 335, or 8.3 per cent; the mortality of those treated the first day of the disease being 1.7 per cent, the second day 4.6 per cent, the third day 8.6 per cent, the fourth day 17.3 per cent, the fifth day 21.1 per cent and the sixth and subsequent days 19.6 per cent. In 3628 cases reported by New York City the

Saccharin in food suspends or retards the transformation of starch or albuminous foods in the digestive organs.—McGuigan, *Diet. Gaz.*

Saccharin was found by von Jaksch to cause eructations, vomiting, loss of appetite, and diarrhea; in diabetes does only harm.—*Diet. Gaz.*

corresponding figures were first day 1.5, second 2.8, third 4.6, fourth 15.2, fifth 19.8, sixth and over 18.5; total average 5.9 per cent.

The lower mortality of the late period, apparent in both series, may be explained by the mildness of attack or superior vitality of the patient that permitted survival to that time.

The author strongly favors intermuscular injections in ordinary, and intravenous in the worst cases, as more efficient and less painful.

Of the fatal cases 20 per cent deaths were attributed to heart failure, and of these 80 per cent occurred in cases receiving antitoxin on or after the third day. Diphtheria toxin is absorbed by the distal ends of the nerves alone, and thereupon insulated from the antitoxins in the circulation. Rolleston found that paralysis had decidedly increased since the introduction of antitoxin, though this substance does not cause paralysis, and when used early the liability to paralysis is lessened. He urges the early use of massive doses, giving from 3000 units in mild forms up to 24,000 in the severest.

Of 11,328 persons receiving immunizing doses of antitoxin but 33 developed the malady, all mild forms, and all recovered.

In the treatment of the paralysis Pease seconds Rolleston's suggestion of adrenal extracts.

The skin, joint and other disturbances following antitoxin injections are not due to the antitoxic principle but to other elements present in the serum; which furnishes a powerful argument for the isolation of this active principle and its administration in purity, without these undesirable attendants. When the profession shall have been educated up to the appreciation of clean medicine and dirtless therapy, we shall soon see the progressive pharmaceutical man-

ufacturers meeting the demand. The trouble is not with them. Ask any one of them why he puts his clean alkaloids back into the dirty tinctures to bring the latter up to the standard strength and he will tell you it is because the doctor is used to the dirt and insists on having it. Years ago the lessees of the Bedford Springs tried to substitute glass for the wooden barrels in which they had sent out the water. The innovation met with instant complaint. They tried to explain that the water decomposed with the wood, and became offensive; but the purchasers replied that they knew it smelt like bilgewater, but that was what they were accustomed to get, and what they wanted; so back they went to the wood.

The larger the injections of antitoxin, the more decided the disturbances; and repetitions after some weeks were followed by even worse symptoms. In Rolleston's 568 cases skin affections occurred in 81 per cent. Severity of the diphtheria lessened the liability to skin diseases.

The first symptoms were lethargy, hyperidrosis and oliguria; scarlet rashes, urticaria, heart and lung disturbances. The second group occur in a week, as urticaria, edema, rigors and vomiting. The third come after the tenth day, as circinate erythema, pyrexia, adenitis and joint pains.

Gibson succeeded in obtaining the antitoxic globulins in a comparatively pure state, and from them the serum disturbances were much less. He also thereby succeeded in producing a concentrated preparation.

We gladly take this opportunity of advocating the use of antitoxin, and to express our hope that similar serums may be elaborated for use in other infections. But we do not cease all our efforts while awaiting the serums; and we especially desire to urge the physician not to cease all other measures while using antitoxin. Anyone who

Dietetic Gazette suggests chemical synthesis can produce an artificial food suitable for man's needs. We'll stick to the real thing.

In the *Dietetic Gazette* for April, Benedict calls attention to the difficulties attending an inelastic dietary. Look it up.

will take the trouble to completely cleanse the secretions and all he can remove from the nasal tract when infected with diphtheria will see a subsidence of morbid phenomena as marked and more quickly manifested than after antitoxin. If this were done in addition to using the latter, we are sure the mortality would be less than when no other measure is employed but antitoxin. The same applies to the saturation of the patient with sulphides—it does not interfere with antitoxin in any way.

NUCLEIN IN ALBUMINURIA AND SEPSIS.

In view of the interest manifested by the profession in the recent experiments by German and Russian clinicians with trypsin we wish to remind the profession that we are still pursuing our studies as to the action of nuclein and other proteid substances, and shall have some important announcements to follow.

There are nucleins and nucleins, and nuclein containing but a small proportion of nucleic acid (chiefly proteid in nature) has proven repeatedly to be without any question the indicated remedy in albuminuria. Nuclein also possesses marked germicidal properties, and if given in full doses in cases where autoinfection from a germ-laden bowel exists, will prove of infinite service. The fact which is at this time, however, of greatest interest is this: Nuclein exhibited in ten to fifteen minim doses every three or four hours will cause the complete disappearance of albumin from the urine even in acute nephritic conditions. The patient ceases to lose weight and under proper therapeutic and dietetic measures commences to regain lost vitality and shows an increase in weight. The reason for this is clear and will be distinctly outlined in a set of papers which will shortly appear in this JOURNAL.

In the Hamburg cholera epidemic every man who took beer survived; which Ster attributes to the lupulin present in beer.

Doctor, give nuclein in full frequent doses in all septic conditions of the intestine, in germ-invasions generally, hypodermically or per os, and above all push this remarkable product in every case in which albumin presents in the urine. You will be astonished at the results. The exhibition of nuclein should be continued for some days. Irritative drugs should not be given at the same time. Veratrine to control blood-pressure and arbutin to promote elimination are indicated as essential synergists.

There are many conditions, especially those of lowered vital resistance, where the additions of this remedy to the therapy will turn the tide of disease and save your patient. The resourceful physician is constantly finding new uses for nuclein, and the half has not been told.

Try it yourself, Doctor, and report your experience.

THE OLD DOCTOR.

From out the dim recesses of memory comes to me the picture of an old country doctor as he presented himself fifty years ago. He only resided about seven miles from our farm, consequently sending for him just after he had started on his morning rounds, he managed to get in to see our ailing ones sometime during the following day. Dismounting from his horse, he brought with him into the house a pair of venerable saddlebags. Long contact with the animal he bestrode had imparted to them the odor of the horse's perspiration, which almost overcame that of rhubarb.

After inspecting the patient, the doctor unstrapped the bags and from their depths produced sundry small paper parcels, containing roots, barks, leaves and herbs, which wrapped in an ancient paper covering whose leaking corners permitted no small portion

Much of the disrepute into which lupulin has fallen is due to the poor quality supplied, says Reilly, J. A. M. A.

of the contents to mingle in a dusty mass at the bottom of the satchel. It always was, as it yet is, a source of speculation to the writer as to what the Doctor did with this precious dust. Whatever the doctor selected for the patient, of this we could be sure that it was so vile that even the prospect of an escape from going to church the next day scarcely sufficed to keep us on the sick list. It may be calculated that in the saddle bags the doctor carried a weight of some twenty pounds and even then the patient generally had to dispatch a messenger to the doctor's office for some necessary item not to be found in his portable stock.

There was little wonder that the ever present potency residing in the lancet should have been so generally called upon by the physician in his treatment of acute maladies. Here we have the first edition of the office pocket pharmacy; the little marvel so easily put into operation, always ready, always a power for good or ill, and in his experienced hands generally exerted for the former.

In the course of time Thompson arose, and Charles Reade, and others of that ilk, and with the boldness engendered by consummate ignorance assailed the lancet and its scarcely less powerful allies, mercury and antimony; after a bitter struggle driving them completely out of the field.

The number of medicines multiplied also, while the population thickened, and the pharmacy arose, to relieve the doctor of much of that work which he could delegate to such an assistant, leaving him more time to devote to that portion of his work which could not be thus delegated. These two influences combined, however, to get the doctor out of the habit of prompt and masterful intervention in the earliest stages of acute maladies.

Homeopathy arose also, and a ready explanation of its lack of failure was supplied

by the doctrine which then became prominent attributing to acute maladies a uniform course. Physicians ceased to speak of curing diseases, but sought, rather, to conduct the case to a successful termination. As time passed these concomitant causes had their influence, so that the art of effective intervention in the early stages of acute maladies may truly be said to have become as obsolete as that of tempering copper. In fact, it has become heretical for any man to affirm that such an intervention is a possibility.

Curiously enough, as this final result was reached, through a succession of causes beginning with the disuse of the remedies the physician could apply effectively and promptly at his first visit to the patient, the introduction of a new line of remedies as portable as the lancet, has brought back to the medical mind the belief in the possibility of accomplishing what our forefathers claimed from the lancet. The modern pocket pharmacy consisted of a little nine or twelve-vial case, which, filled, contained twelve hundred doses of powerful remedies in the most concentrated form. In it are the remedies whose effects can be secured within the fraction of a minute, by their administration hypodermically or when dissolved in hot water; as powerful as the lancet, as accurate in their effect, each as capable of being directed with equal certainty, but without the disadvantages attendant upon the abstraction of blood.

As this little arsenal of therapeutic potencies becomes familiar to the physician, and he grows skilful in the direction of its magic forces, we hear him again put forward the claim of jugulating acute attacks of diseases, which has not been heard since the lancet fell from the palsied hands of our fathers. Again we hear physicians talking of "a duty to perform," and of prompt and effective intervention in the treatment of their cases;

Lupulin contains lupulinic and humulic acids, closely related to valerianic acid, also volatile oil and amorphous bitter resins.—Reilly.

Reilly speaks well of lupulin for neurasthenia, hysteria, intestinal pains, and pains accompanying acute prostatic affections.

of the possibilities resulting therefrom, of the decision, the boldness of thought, the energy which characterize the true physician, the man up to whom the people look in times of trial, and those times of emergency which bewilder the ignorant. A bolder and more vigorous life is diffused through the professional body, their ideals have altered, the idolatry which has hitherto been paid to the art of diagnosis has become worn out, and a practical, more utilitarian creed is inculcated. We are not content with the statement as to the end of the patient's disease, not even with a learned opinion as to what treatment might have proved effective when he was first taken ill some three weeks previously. We demand that when the physician finds his patient trembling on the verge of a dangerous malady he shall then, that very moment, without even the delay necessitated by a visit to the pharmacy, intervene actively and intelligently to break up the threatened attack and jugulate it in its earliest stages, thus fulfilling the high ideal of preventive medicine.

That this is a possibility is by no means as yet admitted by the mass of the profession; in fact we find opinions varying on this subject as widely as the poles are asunder. But this observation is characteristic in the highest degree—that the most virulent opponents of the possibility of jugulating acute diseases are invariably—those who cling to the old pessimistic, nihilistic and expectant methods, while those who most strongly insist on the possibility of accomplishing great things by such intervention are those who have most used the remedies and practised the methods by which it is accomplished. The doubters occupy the stages of the way between these two extremes.

And so—while we rejoice that the crude and nauseous mixtures of "the old doctor" are going, we need to emulate his intimate

acquaintance with remedies. Let us study drug effects—and become optimists.

SOUL TOXINS.

There's only one person injured by an enemy and that is the enemy. Tendencies grow on one, and the more we open our hearts to hatred of our neighbors the more hateful we will become. Hate, envy, suspicion, these are the toxins that poison the soul.

Eliminate them, Doctor. Do not leave a particle to remain in your being, to pervade it with atrabile. It is easy enough to do. Look on the good side of the other fellow; put yourself in his place and see if you would not have done about what he did under the same circumstances. That cuts out any chance you might have for criticising him. If he has treated you meanly, you must have had a chance to benefit him which you neglected—and that's an injury in itself—so, you began it.

Wonderful, how soon the dull old world begins to brighten up when one adopts this philosophy.

Try it.

ILLUMINATING GAS.

Draper gives the following as the composition of gases now used:

	Coal gas	Water gas
Illuminants	6.19	14.39
Marsh gas	35.77	23.43
Hydrogen	49.39	31.20
Carbonic oxide	6.70	29.30
Nitrogen	1.37	1.34
Oxygen03	.03
Carbonic acid55	.31
	100.00	100.00

The experience of miners shows that marsh gas is not specially injurious to health. The illuminating gases are chiefly

Foss found lupulin harmless and effective in cases of insomnia and nervousness. Stern says it is antiseptic.—J. A. M. A.

Hallberg approves of lupulin as an intestinal antiseptic when given with about 5 per cent of alcohol as an amber liquid.—J. A. M. A.

olefiant gas with a little acetylene, and their effect is uncertain, though Draper evidently looks on them as far from safe. Carbonic oxide is the principal source of danger, when the proportion in the respired air reaches 1-2 per cent. The cheap production of water gas has led to its general use notwithstanding the decided increase in the number of deaths from it.

A man dying from inhalation of gas showed these conditions: Skin pink at dependent parts, face fresh, eyes injected, corneas bright, tongue behind teeth, slight vomitus, odor of gas exhaling. Muscles florid, heart normal, contained bright blood, nearly fluid, with small soft clots, no engorgements of right cavities, lungs displayed the redness everywhere present, bloody froth in passages, no ecchymoses, spleen large, soft, bright red, stomach normal, bowel red, pancreas pale red, liver red and congested, kidneys ditto, pia mater injected and brain section showed puncta. The dominant feature is the change in the blood. Carbonic oxide replaces the oxygen, reducing the hemoglobin and imparting to the blood the peculiar cherry red tint.

The symptoms preceding death are dizziness, headache, nausea, vomiting, great weakness, tinnitus, apathy, increasing stupor, deepening into coma. The expression is normal, the attitude easy, showing that death is anesthetic and painless, without convulsions. The time of exposure varies. Animals exposed to an atmosphere containing 1-2 per cent of carbonic oxide die in an hour and a half.

The effects of continued inhalation of gas in proportions too small to cause death are not certainly known, but Draper suggests that to this may be due some of the neuralgias, headaches, anorexia, debility, gastric derangement, and ill-defined conditions commonly met.

Fraenkel found that injecting digitoxin the effects were only felt typically sixty hours after the injection.—*J. A. M. A.*

Yarrow attributes to chronic poisoning with gas, anemia, frontal headache, sometimes leucocytosis, foul taste in the mouth, abdominal pains, constipation and persistent indigestion, headache worse on rising, and debility extending to complete prostration. The patient never feels well, but is improved by resort to the open air. The face is generally pallid. By the spectroscope the gas may be detected in the blood six weeks after acute poisoning.

The presence of carbonic oxide may be detected by Vogel's test: Fresh normal blood is added to distilled water until the latter is tinged faintly red; about 4 cm. placed in a flask of capacity over 100 cm. This is shaken for a few minutes in the suspected atmosphere when if carbon monoxide is present the solution will assume a bright rose or cherry tint. On adding ammonium sulphide the spectroscope will show the two bands of oxyhemoglobin replaced by the band of reduced hemoglobin, but the two bands of carbonyl-hemoglobin will be unchanged.

Haldane asserts that in Boston since the introduction of water gas one death out of every 300 is due to this agent. Whether this applies to other large cities has as yet not been investigated. Bayles estimates that the leakage from the mains in New York reaches the gigantic figures of 2,640,000,000 cubic feet per annum. This causes the explosions in sewers. Most of it finds its way into houses along the drain pipes. The odorous principles are removed by filtration through earth, so that this gas is more dangerous than that escaping directly from the gas fixtures.

The only possible treatment for gas poisoning is oxygenation. This implies artificial respiration, and the use of oxygen. If the patient could be placed in pure oxygen it is possible it might replace the gas quickly

"That tired feeling" is now pretty generally recognized as autotoxemia. A writer in the *Arena* advises euonymus.

enough to sustain life, but this is uncertain.

AS TO THINKING RIGHT.

If a man thinks everyone is against him he will treat them so they will be. If he thinks everyone is a friend he will treat them nice and they will be friends. If a man is suspicious of everyone they will be suspicious of him. You get just what is coming to you good or bad—that's sure. If you keep on fighting, you'll get licked some time, good and plenty.—Buster Brown.

Many a man has yet to make the discovery that he is no higher in his ideals, no more honest in his dealings with others, perhaps no more "brainy" than the average man with whom he is accustomed to rub elbows every day. It doesn't pay to set ourselves up on pedestals from whose superior heights we look down on other people. I have great faith in the essential equality of men. After the varnish is rubbed off and we get down to men themselves the spiritual fiber of us all is about the same—some of it cross-grained, other coarse to be sure. But underneath it all there is the same respect for high principles, the same admiration for nobility of character, the same love of fair dealing—modified and colored by individual peculiarities and conditions.

It pays to treat every man as if you really believed him to be what he really is—a brother. His manhood will respond to your own manliness, and you will both be the better for this mutual faith in each other. Once in a while you will be deceived. Some parody of a man will mistake your open-heartedness for servility, for weakness or for self-seeking. Go forward like a man. After all there are not many like him, for the heart of the Average Man is in the right place.

All this doesn't mean that you should abdicate any of your own rights. An honest man's opinions are the result of much travail

of soul and some labor of the body. They are his and he should cling to them tenaciously until you or some other man can convince him that he is wrong. It is your right, as it is your duty, to give your patients the remedies which you think will do them the most good—and to give these remedies in your own way, to prescribe or dispense, to use official or proprietary remedies—as you will. Your first duty is to look to the welfare of your patients, and you must be honest with yourself.

This right implies that the same liberty of judgment you demand for yourself should be freely accorded the other fellow. He may be right, you wrong. Here again the pedestal act is unmanly and unwise. If you think he is wrong approach him as man to man—and listen to his arguments as well as handing out your own. And if you are beaten, acknowledge it like a man.

Above all avoid a fretful and fault-finding spirit. Constructive criticism is needed. Personalities, complaints and intellectual dictatorship never. Fight if you must—and to the finish. But don't whine.

THE CAT—AN APPRECIATION.

The Egyptians used to worship the cat. Just why we do not know; but possibly for reasons that may be guessed after reading the following poem. At any rate the cat can set some of us a pretty good example. This matter of lighting on one's feet is not entirely accidental; it depends a whole lot on the cat—also on the man.

You take a cat up by the tail
And whirl him round and round,
And hurl him out into the air,
Out into space profound:
He through the yielding atmosphere
Will many a whirl complete;
But when he strikes upon the ground
He'll land upon his feet.

Wherrell advises elaterium for cystitis of the bladder neck. At least this remedy depletes a congested rectum.

Never do a long operation when a shorter one will do as well. Never make a move until you know what you are doing; then do it.—Ballenger.

Fate takes a man, just like a cat,
And, with more force than grace,
It whirls him wriggling round and round,
And hurls him into space;
And those that fall upon the back,
Or land upon the head,
Fate lets them lie just where they fall—
They're just as good as dead.

But some there be that, like the cat,
Whirl round and round and round,
And go gyrranting off through space,
Until they strike the ground.
But when at last the ground and they
Do really come to meet,
You'll always find them right side up—
They land upon their feet.

A MATTER OF BUSINESS.

In all that concerns his own health the American citizen is notoriously gullible. The man who in all ordinary business transactions is a model of caution, who will take the word of no man when buying a horse, or settling upon a new brand of cigars, such a man becomes inconceivably credulous when the virtue of a new pill or a new "cure" for any one of a dozen different diseases is offered to his attention. "Anybody's word is good enough for him here," says S. H. Adams in *Collier's Weekly*. "An admiral whose puerile vanity has betrayed him into a testimonial; an obliging and conscienceless senator; a grateful idiot from some remote hamlet; a renegade doctor—or a silly woman who gets a bonus of a dozen photographs for her letter—any of these are sufficient to lure the hopeful patient to the purchase."

There is a large modicum of truth in these words. While we cannot conceive that a man who makes an arrant ass of himself by accepting as law and gospel all the puerile and senile misinformation proffered him by the patent-medicine advertiser is entirely *compos mentis* and a man of really dependable judgment on any subject, it certainly is true that many, if not all, people take leave of their wits

more quickly when afflicted by real or imaginary ills—especially imaginary—than under any other circumstances. Beneath the surface there is an unconfessed respect for the wonderful, the unreasonable, the unbelievable, and this is what leads people to believe in secret remedies of highly hypothetical curative powers; and it is also the same quality which fills the ranks of the faith-healing cults. It is not so hard to believe what we really want to believe. There's human nature in this fact and shrewd and unscrupulous men are quick to take advantage of it.

But there is no need of lashing ourselves into a frenzy over the evils of patent medicine. A better way is to try to find out why so many people prefer to trust themselves to these nostrums rather than to the doctors. It's humiliating to make this confession—but we all know that there are thousands of people who will invest \$5 in three bottles of "bitters" when the services of the nearest physician could be secured for half that—medicine included. Why? The average doctor, after being schooled in nihilism through the four years of his medical course, and fed on the same intellectual skimmed milk thereafter, soon gets lean in therapeutic faith; he has no confidence in himself or his power to heal the sick. Naturally the people have no faith in him.

Wouldn't it be better business, as well as better sense, to study the action of our remedies more carefully, to place ourselves in a position where we have all this valuable knowledge at our fingers' tips and are able to exhaust the possibilities of every drug when occasion demands? It is wonderful how the doctor's faith increases when he learns to act decisively, without hesitation with a clear aim in view, and with remedies whose action he fully understands and

A sharp pointed instrument in a cavity is a dangerous thing. A dull one is safer.—Ballenger, *Pa. Med. Jour.*

Don't "fish" for what you want; but look, see, feel, comprehend, then remove what you want.—Ballenger, *Pa. Med. Jour.*

upon which he feels that he can absolutely depend.

The best way to undermine the popular faith in nostrums is to give something better. Let us have more knowledge and greater faith in ourselves—just as a matter of business if for no other reason.

WHY THE STOMACH DOES NOT DIGEST ITSELF.

This is an old, old problem. Not only has it been the subject for much speculation among the physiologists, but practically every debating society in the country has had a turn at it. In 1903 Guenzel discovered the presence of another element in the gastric juice, which is called *antipepsin*. The function of this substance, we are informed, is to oppose the effects of pepsin in an acid medium, that is to check the formation of peptones. According to Guenzel antipepsin is the principal means of defense of the gastric mucous membrane against autodigestion. While its source of origin is not very well known it seems to be produced principally in the gastric epithelium—the part principally to be defended. However, it is also produced in the other coats of the stomach, as well as in various other organs.

AND STILL PNEUMONIA!

A question frequently asked us is, why is the mortality from pneumonia so high in the city hospitals, if the alkaloidal methods and remedies give such excellent results? The excellent results are not to be obtained, however, unless the means are utilized.

Last December Prof. Loomis presented a paper to the Medical Society of Greater New York, in which he described the methods of treating pneumonia, then in vogue in

four of the large hospitals of that city, and the results. The following extracts will give some idea of the routine:

The treatment in all four commences with calomel followed by salines; hot or cold applications, usually the former; milk diet, sometimes with broths, eggs, crackers.

Fever.—The Presbyterian uses cold packs to the front of the chest, etc.; also the Roosevelt; the New York uses alcohol sponges and cold packs; Bellevue tepid sponges; tub baths rarely at the N. Y. for toxemia, at the Presbyterian for alcoholic nervousness.

Cough.—Codeine, gr. 1-4 every four hours; sometimes heroin or morphine.

Insomnia.—Trional or veronal, gr. 10, codeine gr. 1-4.

Edema of lungs.—Adrenalin hypo., atropine, cupping, oxygen only for dyspnea and cyanosis—forerunner of end.

Heart failure.—Alcohol has first place in all, less at the Presbyterian; strychnine when whisky fails, and for edema and cyanosis; digitalis little, at Roosevelt for cardiac dilatation, the tincture, sometimes fluid-extract. Glonoin very little; at Bellevue by hypo., gr. 1-50.

Tried and discarded.—Potassium iodide, sodium salicylate, creosote, pneumococcus serum; creosote sometimes used still at Roosevelt and Presbyterian, with no results manifest. Roosevelt uses saline enemas in alcoholics and failing nutrition with marked benefit.

The results.—Presbyterian, 600 cases, mortality 34.8 per cent; Roosevelt, mortality about 40 per cent; New York Hospital 38 per cent. Bellevue mortality is not stated directly, but the author says, in the four hospitals it varies from 35 to 45 per cent, so that it may be found within those limits.

Assuredly, this is not the treatment advised by us. The intestinal antiseptics, the

Operate with a view to the patient's comfort and permanent relief. That is for what he employs you.—Ballenger, *Pa. Med. Jour.*

For asphyxia neonatorum some one recommends atropine sulph. gr. 1-2000 and strychnine sulph. gr. 1-500.—*Pa. Med. Jour.*

vasomotor equalizers, are not considered, the elimination imperfectly and casually accomplished; while the use of alcohol and the free employment of morphine advised by the author can scarcely fail to account for a share of the high deathrate. The results will hardly induce anyone who has employed the active principle methods to forsake them for those of the great city institutions.

ANOTHER EXAMPLE: ONE OF THOUSANDS.

The logic of what follows is so clear, so unanswerable that only the wilfully blind can fail to see it.

At the last meeting of the American Pharmaceutical Association, held at Atlantic City, Russell W. Moore, A. M., M. S. C., chemist in charge of the laboratory of the United States Appraiser at New York, read a paper on the quality of drugs coming into the port of New York. His paper showed the wide variation of the active-principle contents in the crude drugs. We will take a single example: In 1904, 98 samples of jalap were assayed, 28 samples were found below the official standard and the percentage of resin varied between a minimum of 6.14 per cent and a maximum of 23.34 per cent. In other words, some samples contained just four times as much resin as others. In 1905, 276 samples have been assayed, and of this entire number only twenty samples came up to the official standard. The minimum of resin was 2.10 per cent, while the maximum was 15.63 per cent. In other words, some samples of jalap contained nearly eight times as much resin as others did.

In view of these undeniable official statements, is it not absurd to use the powdered jalap or the compound jalap powder? Is it surprising that the physician fails to get

results one time and gets an excessive, even dangerous action the next time?

The moral of this, as of hundreds and hundreds of other investigations is: use the unvarying constant active principle. Use jalapin (the resin of jalap) instead of the uncertain jalap root.

MEDICAL EDUCATION.

From the Council on Medical Education of the A. M. A. comes a report that may be studied with edification. It tabulates the results of the State Examining Boards in 1904, as affecting the graduates of each of our medical colleges. This shows the standing of each institution as determined by these Boards, and affords a warning to those whose methods need reform. We find nineteen colleges which have had no failures in their candidates, the roll of honor being headed by the Syracuse University, which presented 37 successful specimens of her teaching. Only five of the nineteen presented ten or more candidates. Among the institutions with large classes Harvard takes the lead, with one failure out of 160 graduates, followed by the Northwestern of Illinois with two failures out of 171, and Johns Hopkins with one out of 59; the percentages being respectively 0.6, 1.3, and 1.7. The largest class was that of Rush, 298 with 15 failures, or 5.8 per cent. Illinois University presented a class of 259 with 17 failures, New York P. & S. 246 with 9 weak members, and Jefferson with 26 bad ones out of 224, which comprises the colleges presenting over 200 candidates.

From these honorable figures the list meanders down through the grades till the bottom is reached in one college whose three candidates contributed a percentage of failures amounting to just 100.

In old infusions and in leaves stored damp digitalis glucosides decompose into resins acting like picrotoxins.—Hill, *N. Y. M. J.*

Berberine is found in barberry, columbo, hydrastis, podophyllum, pareira, yellow parilla, xanthoxylum, etc.—Hill, *N. Y. M. J.*

The Illinois schools contributed the greatest classes, 1115 graduates with 84 failures. Pennsylvania's 684 included 76 who failed; Missouri's 678 had 94; New York's 677 had but 34; Maryland's 642 had 178; Tennessee's 501 contributed 162 imperfects, out of which Vanderbilt was debited with but three of her 52 graduates, her percentage being 5.9. Kentucky graduated 420, of whom 68 failed; Ohio 366 with 61 debits, and Massachusetts with 300 had 32 discredits. Of Wisconsin's 12 representatives 4 failed, or 33.3 per cent.

When one contrasts Vanderbilt's fine percentage with the over 35 per cent of failures registered against the other colleges of Tennessee, the thought must arise that it were better that all these men had been submitted to Vanderbilt's instructions. And since no Kentucky school won a better rating than 25 per cent of failures were it not better that her sons should join the illustrious colony of Kentuckians who have won honor in Chicago? With all her brain-racking cramming the University of Michigan barely achieved a percentage of 10, 11 of her 114 failing, while of the 109 representing the University of Minnesota but 2 proved deficient, her percentage being but 1.9. Missouri presented remarkable variety, the University of the State presenting a clean record with 15 graduates, the others ranging from 17 to 80 per cent.

We shall look with interest for the report for 1905, which will show what institutions have taken heed and improved their facilities and tightened their grip. It must be borne in mind that with small numbers there is sometimes a special condition that materially alters the standing; for instance, one State Board once reported a college as presenting three candidates, all of whom had failed. But investigation showed that but one representative had ever been presented, a man who had unfortunately contracted

drug habits since graduation, and amused himself coming forward on three successive occasions to disgrace his Alma Mater. But in the long run these things equalize, especially as the numbers are larger.

Too much trust should not, however, be put in mere statistical information. There are many conditions which may modify figures like these. For instance, they are made up from the examination of old and new graduates alike; Rush college with its enormous alumni list coming in under the old regime of the two-year course would not be so likely to make as good a showing as Northwestern, which from the very start has insisted upon three years. It would be interesting to know how many of the failing Rush men are of the "old guard." Again, the severity of the examinations varies enormously in different states. If the "home state" of any school, where most of its men come up for examination, has a reputation for the severity of its tests, it is to be expected that the school would not make as good a showing as one of another state which is notoriously easy.

Don't therefore jump at conclusions—though it is certainly the part of prudence for schools with low averages to endeavor to move up a little nearer to the front of the procession, even if they cannot get quite to the top.

CLEAN MEDICINE.

The man who said that things are not always what they seem was probably conversant with the drug business. In the *Bulletin of the American Pharmaceutical Association* for April, 1906, in the report of the committee on the drug market, reference is made to morphine tablets varying widely from the labeled strength and containing cane sugar instead of milk sugar as labeled—morphine tablets so-called, but containing

Sixteen pharmacopeial plants owe all virtue to tannin. Why not restrict to a smaller number or use tannin itself?—Hill, N. Y. M. J.

In al this world ne was ther non him lyk
To speke of phisik and of surgerye;
His studie was but litel on the Bible.—Chaucer

no morphine; sodium salicylate tablets in which 15 per cent talcum is substituted for the medicinal salt; quinine pills containing 1-3 grains instead of two grains as labeled; asafetida, 45 per cent sand and 60 to 70 per cent insoluble in alcohol; the bark of cotton stem used instead of the root; and less than half the male fern examined being found genuine, are some of the plums extracted from this report.

However, this is probably of little interest to the men for whom the galenics are good enough; a pound of extract means a pound of drug, and if nearly half of that drug is sand, what's the diff? Very probably it would not do any good anyhow, and if the patient is going to get well she will get well, no matter what you give her. Then again, plenty of patients judge the merits of a medicine by the vileness of its taste.

Whenever you meet a physician who talks in this pessimistic manner about his therapeutics you may set him down at once as a man who uses the kind of drugs that beget such views. Whenever a man says he is using fewer drugs every year you may assume that he is using the sort of drugs that a man ought to use less every year. But the men who talk about the choice between aconitine, veratrine and gelseminine as applied in practice do not impress us as pessimistic. Those who carelessly employ any one of a group instead of selecting the right one, may be compared with the musician who strikes a whole octave at once instead of the right note. We will agree with the latter that pianos should not be used at all.

We fear that some of our old friends have been so accustomed to dealing out bilge water to their patients that clean medicine, not in a state of decomposition, would hardly seem like the real thing to them. But in spite of the acknowledged fact that each of us is expected "to eat his peck of dirt" before

departing this life, we would rather take it in the usual food products and not in the shape of medicine. If we cannot have clean meat when we are well, let us at least have clean medicine when we are ill.

THE DRUGGIST'S PRIVILEGES.

In the May number of the *Bulletin of Pharmacy* there is a remarkable letter, which will bear some attention. The writer is a druggist who received a prescription calling for aconitine gr. 48-134, digitalin gr. 48-134, emetine gr. 24-12, codeine sulphate gr. 8, and water to make half an ounce. Dose, 10 drops every half hour until cough is relieved. The druggist asked for suggestions.

Under the circumstances we cannot blame the druggist for being bewildered. He could scarcely be expected to know that the prescriber had in his mind the Abbott granules of amorphous aconitine, whose dosage was fairly correct in the prescription, when there are numerous aconitines in the market, varying in strength from gr. 1-1000 to gr. 15. But the druggist erred in not referring the prescription back to the doctor for more definite instructions. Instead of that he increased and decreased the ingredients until he had what *he* deemed the proper dosage for the patient.

This is absolutely inexcusable. It would fully justify the physician in refusing to permit another prescription to go to that shop, or to any pharmacist who would not first give full assurance that he would fill prescriptions exactly as written in all respects; and when a possible error had been made by the prescriber refer the prescription back to him for correction or verification. Under no other circumstances would the doctor be justified in entrusting the lives of his patients and his own reputation to any druggist.

American Medicine henceforth appears as a monthly. This leaves Philadelphia without a medical weekly, 4 having failed there within 15 years.

The *A. M. A. Journal* keeps up a steady fight against acetanilid, not in unethic mixtures but as a remedy.

Moreover, by failing to call the doctor's attention to the serious peril he ran by such careless prescribing, the druggist laid the foundation for future error of the same sort. An explanation would have enlightened him and possibly saved lives.

Under the circumstances we do not see how there is any escape from the injunction for the doctor to specify the aconitine he desires. He need not specify the manufacturer, but at least he must add amorphous or "crystallized," as he prefers either of these. When the Pharmacopeia has caught up it will, we trust, provide separate names for these principles, and ordain a definite strength so that we can simply order "Aconitine, U. S. P.," and be sure of getting exactly what we want. Until then supply-houses for furnishing these principles of unvarying standard strength are an absolute necessity, and must be continued, and the doctor will have to specify them, or do his own dispensing.

CERTAINTY.

What *certainly* in any one particular means is scarcely comprehended. But just look over any article in which drug therapeutics is mentioned and note that the writer invariably suggests that we "try" his remedy. Good heavens! Have we nothing that is sure in therapeutics after all these centuries? Are we to be eternally "trying" things and never to really know a therapeutic fact? Surely we ought to be able in this day of enlightenment and science to *know* what a drug will do, and when its powers are required. Does not each succeeding generation add a certain store of therapeutic facts to those of the preceding centuries?

Not by a darned sight. It just goes over the same old ground, tries the same old experiments, grabs at every new thing,

knowing nothing worth saving of the old, and endlessly repeats the faults and errors of its predecessors. The consequence is that today, save a few evacuants, we do not know exactly what any drug is going to do when administered, and we do not know enough of the evacuants to choose between senna and salts.

Here and there we have seized upon an undoubted therapeutic fact, and how we do cling to it, and use it. Take the control of mercury over syphilis, of quinine over malaria, and we actually make use of these facts to elucidate our pathology. What a comfort it is when they have cleared away the doubts and given us firm footing.

Firm footing. In the therapeutic swamps and quicksands of uncertain half-knowledge we grope painfully, until at last we get one foot upon a sure and solid bit of ground. What a relief. We can rest a moment and draw a long breath, then when we are ready to take the next step we poise ourselves on this one and hunt about for another firm support.

In the shifting, whirling chaos of medical theory, where nothing is stable, nothing final and ultimate, the beliefs of today obsolete tomorrow, we are in like bewilderment. We resolutely tackle a problem, going to the very bottom, and concentrate all our energies on it until we have arrived at the solid rock, the absolute truth—and just then someone arises to demonstrate to us that our premises were wrong, our conclusions mistaken, our methods fallacious, and we find ourselves at the bottom of the sandhill we had so laboriously mounted. Ehrlich's theory? Oh, yes. I recollect. How do you remember all these old things?

If you have grasped our idea you will realize why it is we speak so often of the *comfort* that comes from the practice of medicine with the active principles. We

We make little use of acetanilid as we usually prefer aconitine or veratrine; but we do not condemn the former.

If you desire to see your name in the *A. M. A. Journal* write an article abusing acetanilid and cracking up phenacetin.

know exactly what they will do, we have that much that is sure and firm in our work, and feeling that much firm ground under our feet we are easier about it, and can take time to find the next. A good example of this is given in Dr. Abbott's paper on Intestinal Autointoxication, in the July JOURNAL. Knowing precisely what was to be expected from the sulphocarbolates in typhoid fever, when the expected results did not materialize, it was evident that the conditions were not as apprehended; the symptoms pointed unmistakably to a decomposing fecal collection, despite the assurance of the attending physician that catharsis had been duly secured; and the unerring correctness of our reasoning was proved, not by the autopsy but by the ante mortem, and the patient promptly recovered when the removal of the toxic mass allowed the antiseptics to do what was to be reasonably expected of them. *That is scientific medicine, real therapeutics.*

Don't blame the doctor if he gets enthusiastic over his new acquisitions. Don't measure the possible or the true by your own knowledge, great as it may be. There are others—emphatically; and even Goliath Osler may find his David, in some obscure, modest, unassuming country doctor, who knows some things that have escaped the ken of the illustrious pathologist.

And yet, we who are advocating the active principles and true therapeutics know well that only the surface has been scratched as yet. What treasures await the investigator we can realize though still beyond our vision.

THE SKIN—WHAT IT TELLS US.

Did you ever consider the skin, and the enormous importance it possesses in the realm of medicine? How much of our knowledge of internal diseases comes from

the skin. How many times the quick appreciation of a condition, and the need of certain direct therapeutic applications, comes to us from a glance at the external covering of the body. The works on skin diseases exclusively grow year by year bulkier; and the evidences of original work in this department may be seen by comparing the volumes on Dermatology, which issue in quick succession from the press.

Vitality important as is the microscopic study of the skin and its ailments, it is sometimes advisable to view it macroscopically, and judge the morbid appearances upon the surface as indications of morbid processes within. We would perhaps not be awfully wrong were we to say that disorders of the skin in general may be looked upon as danger signals urged upon our attention by wise old Nature, who drums continually at our ears for a hearing, would we but open them to her teachings.

Perhaps the underlying principle of skin diseases may be stated as this: That when the blood and the tissues become surcharged with poisons which should have been eliminated by the kidneys, the liver, the bowels and lungs, the skin is called upon to undertake the task of supplementing deficiencies in the remainder of the eliminative apparatus. To a certain extent the foreign aid is accomplished, but if excessive calls are made on the skin its function is disordered and its tissues show the effects of the presence of toxins.

It would seem, therefore, that whenever the skin shows abnormal manifestations, the first duty is to scrutinize closely the condition of the blood, and of the other branches of the eliminative apparatus. The time, we trust, is past, in which the physician applies ointments, plasters, lotions or powders for the relief of an affection of the skin, and totally neglects to ascertain the presence of

Therapeutics is looking up—it takes a long time to go through a pile of medical journals; used to take no time.

It took but ninety days to rebuild the burned CLINIC home, a story higher than the old one and \$10,000 better.

an impacted fecal mass, which is steadily pouring into the blood more toxic matter than can be eliminated by all the excretory organs of the body.

In this connection we wish to quote a paragraph from one of the leading dermatologists of the United States, sent to us in a private letter: "I am going to tell you something. I believe you have done a great deal of good by forcibly and persistently insisting on the value of a clean intestinal canal, and the great importance of intestinal antiseptics. I am on the look-out for articles on auto-toxemia, and every day I find more and more evidence of its great importance as an etiologic factor in disease. In my own specialty I find that more and more dermatosis are being recognized as having their basis in intestinal decomposition and improper elimination."

Verbum Sap.

MODESTY, ENERGY.

This world's degenerating into an awful scramble. Its God is success, and none other does it worship. Force alone wins. We're just a lot of big gasbags, all distending at once, and the one that has the toughest cover and the strongest gas pump swells till he fills the room and squeezes all the rest flat. Power is the goal and strength the means. The day is gone when modest worth sits in the corner and waits till the mighty spies him out and takes him by the hand and seats him at the table among the great. It is not much of an ideal anyhow, since it only looked for a patron to be bootlicked.

The heroic type is now in evidence, the giant who stalks into the banquet hall and with a rude buffet displaces the owner and seats himself in the chair at the head of the table, challenging a stronger to dispossess

him. We may not like it, but it's true nevertheless.

It's all right. Gigantic as he may be, he is after all but one, and the many always outrank the one. He must convince the rest or they will not accept his rule. And to hold power long he must make the masses see that his worth is solid and enduring. Rings and intrigues may apparently succeed for a time but sooner or later comes a Sedan.

The world is to the strong, the fat of the land to the kicker.

The modest who has so good an opinion of himself for qualities the world has been unable to see, and who has had too little force to push to the front, may sit in his little corner and mope, but we have no time to bother about him.

Make a just estimate of yourself, realize the niche in life you are best fitted to fill, and then fill it. Don't mind crowding the other man; if he is the best you can't crowd him; if you are the better he ought to be crowded.

But don't worry over lack of appreciation. The world is wonderfully clear-sighted, and the least pretense or effort on your part to make yourself out better than you are will be detected quickly, and you will gravitate to your level.

If you find that the young scrub, fresh from medical college, is running into your practice, don't get huffy and abuse him, but ask yourself whether he is not perhaps better equipped than you, with more modern means and methods. He whisks past in an automobile while you plod along with old Dobbin—and he saved that child by a tracheotomy you were too slow to reach. He uses modern scientific remedies, and you will not listen to us. Brush up. Dust the cobwebs out of your brain. Get a move on and hustle, or else take a back seat and keep quiet.

G. A. Davis (*Med. Summary*) urges as diet in typhoid, buttermilk and other foods less suited for culture media than milk and broths.

Rouget says amyl nitrite will stop hemoptysis when other agents fail. If they contain enough atropine they won't fail.

LEADING ARTICLES

THE PILOCARPINE GROUP.*

BY WILLIAM F. WAUGH, A. M., M. D.

IN THE pilocarpine group we may class seven alkaloids and by it place one glucoside, allied but less closely. Of these, pilocarpine, physostigmine, apomorphine and emetine are best known, muscarine, apocodeine, arecoline and picrotoxin less familiarly. The relation of these agents, their similarity of action and particularities, are best shown in the accompanying table.

It is by no means easy to determine positively the powers of each of these principles from the data supplied by the physiologic investigators, primarily because the principles with which they worked were not always pure, and hence gave variable effects; and moreover the conditions of the animal with which they were making their tests may not have been identical in all cases. For instance, pilocarpine does not cause sweating when the skin is cool as freely as when it is warm. The effect of veratrine on the ventricles is arrested by low temperatures, as is that of copper, potassium, chloral and ether; but cold increases the effects of strychnine on the spinal cord, if the drug be given in small doses; if large ones are administered raising the temperature increases the convulsions. Picrotoxin is checked or entirely inhibited by low temperatures. High temperatures prevent the tonic effect of digitalis on the heart, by paralyzing the roots of the vagus in the me-

dulla. Many other elements operate to modify the action of even a pure and uniformly-acting drug; such as climate, time of the day, season, conditions of digestion, of the liver and kidneys, and the malady for which the remedy may be given. The matter may be summed up as a complex of difficulties caused by the lack of logical reasoning by the physician. Were we asked what was the greatest deficiency in our system of medical education today we would unhesitatingly reply, ignorance of the laws of logic and their application. We who are painfully demonstrating the therapeutic principle that two and two make four, get tired seeing our colleagues persistently writing down the sum as five or three.

Nevertheless, as acting in similar conditions, definite remedial agents are uniform in their action, and may be applied with the confidence that springs from certain knowledge. Of this group *pilocarpine* stands at the head as regards its power of increasing perspiration, saliva and milk secretion; it alone has been shown to stimulate the secretion of earwax, and to cause leucocytosis. It carries away large quantities of urea with the sweat, and here Bouchard's objection to sudorifics in uremia does not apply. He objected that the water thus lost would have carried out ten times more toxins if passing through the kidneys, but it should not be forgotten that pilocarpine removes five times more toxic matter than the normal perspiration does.

*Read at the Galesburg meeting of the Tri-State Med. Soc., Ill., Ia., and Mo., June 27th, '06.

No other of the group has been shown to cause leucocytosis, and in this function we have one of the most interesting properties of pilocarpine. This drug has been warmly advocated as a specific remedy in several infectious maladies, such as yellow fever, hydrophobia and scarlet fever. Death from yellow fever is due to the failure of elimination, and pilocarpine may aid by freeing the system of toxins or by combating microorganisms, or both. It is certain that those who have employed this agent in this disease have made very favorable reports upon it. The same applies to its use in scarlet fever; and it may well be that the powerful eliminant and phagocyte stimulation of pilocarpine in the early stages of other infections may exert an abortive power over these attacks. Experiment in this direction has been paralyzed by the dogma of the impossibility of altering the course of any bacterial malady, despite the testimony of those who have studied the biology of the microorganisms. An invasion of the body by a small brood does not cause the disease, but only an invasion by such numbers as overcome the resistant powers of the body. If we can reduce the numbers of invaders or increase the powers of the body, we prevent the development of the disease. Hence the use of nuclein and of pilocarpine, which increase the number and activity of the phagocytes, is in accord with the acknowledged principles of bacteriology.

Pilocarpine also seems most powerful of the group in reducing intraocular tension, and hence is preferable in the treatment of glaucoma. A full sudorific dose will stop any form of itching from jaundice, except that due to hepatic cancer, in which case the relief is only temporary. This action is due to the quick elimination of principles which cause itching while present in the perspiration.

Muscarine differs from pilocarpine in being more depressant, and acting with greatest power on the stomach and bowels rather than on the skin and salivary glands. It stimulates both the secretions and peristalsis of the gastroenteric system, causing free purging and vomiting. It is probably the most powerful of the group as a stimulant of the gastric juice, and of pancreatic, intestinal and hepatic secretion, and possibly as a contractor of the spleen. The difficulty in the use of this alkaloid is that it is so quickly eliminated by the kidneys that it is difficult to secure its full effects unless given intravenously, or in large single doses. This should, however, render it preferable for sudden emergencies, and the absence of lasting depression is notable.

Physostigmine acts less on the secretions but more on the unstriated muscular fibers, especially of the intestines. Its primary stimulant action is more prominently displayed on the heart, lungs and voluntary muscles, and on the muscular coats of the arteries, raising vascular tension. It increases muscular irritability, and lowers even normal temperature. Cushny pronounces the action of the three hitherto described as purely stimulant of the peripheral nerve endings. *Physostigmine* shares with *muscarine* the supremacy in stimulating contraction of the bladder walls. It contracts the uterus so strongly as to endanger the life of the fetus, especially toward the end of pregnancy; and this power is exerted also by *muscarine* and *pilocarpine*. All three may in some cases be substituted for *morphine* in treating habits, and the patient is unable to distinguish the resulting euphoria from that due to *morphine*, especially when the habit has endured until passive dilation of the facial cutaneous capillaries has appeared. The effect is not sustained as long as that of *morphine*, and is lost if the

One of the editors furnished over 3,000 footnotes alone during last year, besides other material. Help us out a bit.

Nihilism reached it becomes time to consign the medicine case and library to the funeral pyre and renounce the profession.—*Tex. Cour. Rec.*

doses are too large or repeated too frequently.

Apomorphine exerts its most decided power upon the stomach when given hypodermically, on the respiratory mucosa when taken by the stomach, in both instances acting quickly as is common with all the members of this group. Its effects as an emetic are due to stimulation of the medullary centers. It is the most powerful stimulant of respiratory secretion and of gastric peristalsis. Much unnecessary dread has been manifested of "green" apomorphine, but abundant experience shows that there is no appreciable alteration in the effects of the remedy. A trace of hydrochloric acid quickly restores the color.

Apocodeine and *arecoline* partake of the general stimulant powers of the group as to the secretory gland cells, all which they incite to activity; but their maximum of power is centered on the intestinal muscular fibers, purgation being the prominent action. They also cause free secretion of gastric juice, intestinal and pancreatic fluids and probably of the bile. Some report that arecoline is superior to pilocarpine in relaxing intraocular tension. Veterinarians have found in arecoline a valuable hypodermic cathartic, administered alone or with physostigmine. This seems to be of interest, since there are many instances where a hypodermic cathartic would be valuable, as when the stomach will not retain ordinary cathartics.

While *emetine* is not usually ranked with this group, it is looked upon simply as the successor of *ippecacuanha* as an emetic. But the stronger emetic principle of this root is *cephaeline*, and while *emetine* is emetic it is a very mild one, and its other qualities are infinitely more valuable than its emetic powers. Given in doses too small to excite nausea it incites every digestive

secretion from the saliva to the rectal mucus, including those of the gastric, hepatic and pancreatic glands. It also stimulates the respiratory mucous secretion. Whether it acts on the milk is uncertain. In overdoses it sometimes gives rise to pulmonary edema like pilocarpine. Huesemann found that *emetine* caused a cathartic action which could not be obtained from *ippecacuanha*, in which the crude vegetable matters hinder this action. It has long been recognized that the virtues of *ippecacuanha* in dysentery are not dependent on its emetic properties but are exerted despite these. In India efforts were made to meet the difficulty by depriving the powder of *emetine*, supposing this to be the emetic principle; but these proved unsuccessful. But since pure *emetine* without *cephaeline* has been produced, doses of one grain may be taken without nausea, if proper precautions are observed.

It should be taken after the patient is lying down in bed, ready for sleep, and he should be cautioned against any movements for half an hour after swallowing it; the dose for an adult is one grain of pure *emetine*, in tablets which should be swallowed whole and without water or other liquid, so that solution and absorption may be as slow as possible. If this is done it is unusual that any nausea is manifested. The patient generally falls asleep within fifteen minutes, sleeps eight hours, and awakes convalescent, to have two spinach-colored stools, the tenesmus gone, the digestive apparatus ready for its functions. In acute alcoholism also, when the patient incessantly craves liquor, and is on the verge of delirium tremens, *emetine* taken precisely as prescribed, exerts an influence that can only be appreciated when seen. After testing all forms of treatment from opiates through chloral, bromides, capsicum, feeding, digitalis, etc., the coca wines included, the

Do not be afraid to say—I don't know—should always be coupled with—but I will find out.—*Tex. Cour. Rec. of Med.*

We are compelled to admit that the suprarenal alkaloid is superior to the official desiccated suprarenal gland.—*J. A. M. A.*

writer has found in emetine the ideal remedy. The administration and results are as described for dysentery; since adopting this treatment we have allowed no case to develop delirium, or to continue drinking. The

pure alkaloid employed by the writer, and he is inclined to the view that Wood's emetine consisted largely of cephaeline.

Given in small doses, well within the line of nausea, emetine is probably the most

THE PILOCARPINE GROUP.

	PILOCAR- PINE	MUSCAR- RINE	ESER- INE	ARECO- LINE	AFOCO- DEINE	AFOMOR- PHINE	PICRO- TOXIN	EMETINE
Sweat--solids	+	+	+			+	+	
water	+	+				+	+	+
Saliva	++	+	+	++	+	+	+	+
Tears	+	+	+		+	+		+
Respirat mucus	+	+	+		+	++		+
Pancreat. juice	+	+	+		+			+
Intestinal juice	+	++	+	+				+
Ear wax	+	+						
Bile--glycogen	+	+		+	+			+
urea	+							+
Milk	+							
Urine (solids)	+	+	-					
Suprenals	+							
Gastric juice	+	+						++
All glands	+	+					+	+
Gastric muscle fiber	+	+	+		+		+	+
Intestinal muscle								
fiber	+	+	+	++	+		+	
Bladder muscle fiber	+	+	++					
Uterus muscle fiber	+	+	++					
Bronchial muscle								
fiber	+	+	+					
Spleen fiber	+	+	+					
Pupil contraction	+	+ Int. local appl.	+	-	-	-		
Pulse	+-	--	--			+	?	+-
Heart force	+-	-	+-	-B	-	-	+	-
Lung force	+-	--	+-	-		+	+	-
Lung rate	-	-	+-			+	?	-
Arterial tension	- slight	- great	+-			+-	+	-
Muscular power	-	-	+-			-		-
Temperature	+-	-	+-		-	?	- + ?	-
Muscular irritability	-	-	+			-		-
Intraocular tension	-	-	-	O			-	
Localized action	P. nerve ends	P. N. E.	Cen- (M) ters (C)			Medulla	Medulla	Centers
Excretion	saliva sweat	urine	urine					urine feces
Leucocytosis	+							
Hypnosis		+ ?			+	+	+	+
Nausea	-	O ?	O		O	- or O		-
Death from			resp. pa- ralysis					
Diarrhea	-	+	+	++	+		+	-
Reflex irritability	-	-	-			-	+	-

The + sign means an increase, the - sign a decrease of activity. Where two signs occur in the same column, the first refers to the primary, the second to the secondary effect. O signifies no action, ++ signifies a great increase. Cord, C; Medulla, M.

patient awakes from the emetine sleep sane, sober and prepared to eat and digest food suitable to his needs. The local irritation described by Wood as caused by emetine has not appeared after these doses of the

satisfactory of our remedies for the restoration of normal secretions along the entire digestive tract. There seems to be a true substitutive action here, as in many forms of indigestion with morbid secretions and

The physician can well afford to use hydrastinine in preference to the more expensive suprarenal alkaloid.—J. A. M. A.

It is like pulling teeth for some people to acknowledge the superiority of anything in the alkaloidal line. Why?

diarrhea these are obviated and healthy secretions produced under its influence. In the whole range of the digestive ailments of children we find in emetine all the advantages formerly obtained from ipecacuanha without the distressing nausea that rendered the crude drug so disagreeable to the little patients. This is of greater moment than ever before, since the true Rio ipecacuanha has become so scarce that the last edition of the Pharmacopeia has listed Carthagena ipecacuanha with it, permitting the pharmacist to employ either. The latter is much richer in cephaeline and poorer in emetine.

It is characteristic of the superficiality of our studies of drugs, that no trustworthy data can be had as to the effects of ipecacuanha or its alkaloids on the excretion of urinary solids, or as to their elimination. Surely, before condemning drugs as worthless we might first ascertain what they do in the body, and how they get out of it.

Picrotoxin is placed with this group because it also causes salivation, sweating and vomiting; stimulating the medullary centers strongly and hence slowing the heart through the development of inhibition, lowering temperature (Brunton says raising it), elevating arterial pressure and increasing the rate of respiration. But picrotoxin more quickly and powerfully produces spasms and causes unconsciousness, which none of this group does although emetine disposes to sleep. The relations of picrotoxin are largely with strychnine and digitalin. The properties of this agent and its therapeutic applications deserve study. I know of no more promising field for an investigator in therapeutics.

We see from these considerations that there is in the members of this group a decided similarity of action which is yet far from identity. Under certain limits they may be substituted for each other, but there

is room for the exercise of a nicety of choice as to their applications. While all stimulate secretion in general pilocarpine stands at the head as to inducing salivation, perspiration and the flow of milk. Apomorphine is the best emetic, contesting with emetine the supremacy in inciting bronchial secretion. Arecoline is the best cathartic, muscarine the most powerful stimulant of pancreatic and gastric secretion. Muscarine and pilocarpine largely increase the excretion of urinary solids, but the effects of the others have not been determined in this respect. Muscarine also contracts the spleen most powerfully, as well as the bladder, in both cases followed closely by physostigmine and pilocarpine, the latter acting most powerfully on the uterus. Emetine probably is the best cholagog.

It is probable that the opposition between the effects of small doses and large, primary and secondary action, extends throughout the group, possibly throughout all drug action, and that all these principles strengthen the heart in small doses and weaken it in large ones, all except apomorphine accelerating the pulse. All except picrotoxin, and small doses of physostigmine, lower arterial pressure. Small doses of all increase the force and rapidity of respiration, large doses reverse this. Muscular force is raised by small doses, lowered by large ones, except with apomorphine which depresses it in any dose. The temperature is lowered by all except possibly picrotoxin, but this applies only to febrile temperatures in the case of pilocarpine and muscarine.

That there are other agents belonging to this series seems probable from the following experience: The writer found some mushrooms which he was unable to classify, in any of his books on fungi. They were as large as a dinner plate when fully expanded

Dysentery in Philippines: Banister prefers quinine flushing, 1 to 1,000, retained 5 to 15 minutes.
—*Jour. Mil. Surg.*

Philippine dysentery: Banister finds ipecac less useful than quinine irrigation; olive oil failed completely.

and nearly three inches thick, and did not show any of the characteristics of the poisonous amanitas. He took one young plant, just ready to open, had it cooked just after being gathered, and partook of a single bite. About an hour later he found himself growing weak, with skin white and cold, sweating, pulse feeble, with no alteration of consciousness or dizziness, pain or suffering of any sort. Vomiting and diarrhea followed of choleraic type, very free, without a particle of nausea or pain. The symptoms subsided within two hours, under moderate doses of atropine, leaving the patient none the worse. The mushrooms were examined in the laboratory but no muscarine could be found. Besides, this agent causes marked pain when given in cathartic doses. It seems that there is in this plant an undetected agent which is the ideal emetocathartic.

Possibly *nicotine* should have been included in this group, but this body possesses such remarkable and unique qualities that I think it is best studied by itself. It is perhaps the most purely sedative of all remedies, and it is asserted that the human

body never becomes habituated to it, even after its constant daily use for a lifetime, but the same dose is as toxic as when it is first taken.

The group as studied is seen to possess agents characterized by their prompt and powerful action, their remarkable safety, dependent largely on the quickness with which they eliminate themselves and other toxins, and the wideness of the field they may fill in therapeutics, which has not been as yet defined. In truth, the profession seems to have been a little afraid of these principles, notwithstanding the fact that they are almost incapable of destroying human life, in any sized doses. This paper may also be taken as a protest against the pessimistic tendency of some textbooks to give up all attempts at classification or grouping of remedies, and simply arranging them alphabetically.

This paper is presented simply as a study, a temporary arrangement, that may not be permanent but illustrates the advantage of studying remedies by groups of closely allied agents.

Chicago, Illinois.

HEPATIC THERAPEUTICS.

BY HUBERT RICHARDSON, M. D.

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THE treatment of the liver has to be considered from two standpoints, medicinal and hygienic. The medicinal treatment of the liver is but little understood, being confined to the use of a few drugs, the effects of which are irregular, owing to our being unable to distinguish the different pathologic conditions. Excluding the surgical diseases of the organ and those of the biliary passages, the pathology of

hepatic disease can be summed up under the heading of Cirrhosis, a condition which is always the result of an infection or toxemia.

The hepatic cirrhoses are divided into two classes—those in which the lesions are simply a connective tissue growth, a simple sclerosis, and those in which the sclerotic changes are accompanied by lesions of the hepatic cell. Toxic cirrhoses may be due to an autointoxication or to a heterointoxica-

We of the south would like to see the Mann bill become a law and the druggists relieved of the phenacetic grip.—*Southern Druggist*

We learn from drug journals that "Foamaline" can be used with "great profit in the manufacture of ice cream!"

tion, the former being associated with digestive disturbance, gout, diabetes, etc., the latter exemplified by alcohol, lead, or phosphorus poisoning; the one associated with the cirrhosis of Laennec and annular cirrhosis, the other associated with hypertrophy, demonstrating the resistance and effort at compensation of the sick organ. Infectious diseases, as malaria, syphilis, etc., produce cirrhosis, usually affecting the biliary system, Hanot's hypertrophic cirrhosis being typical of this form. There are cirrhoses due to mechanical causes, as those associated with cardiac disease.

Cirrhoses in which there is simply a growth of connective tissue do not long continue without affecting the liver cells, producing fatty, amyloid, or pigmentary degeneration, causing more or less grave derangement of cell function. During the progress of the disease they cause three modifications of function—exaggeration, diminution, and perversion. As a rule, the exaggeration and perversion of function are transitory conditions; they are represented by the hypertrophic toxic cirrhosis, the result of the resistance of the organ to the disease, but the overtaxed cells gradually succumb to the hyperfunction entailed and hepatic insufficiency follows; the nature of the perversion or exaggeration controlling the precise form of insufficiency which results. Hepatic insufficiency may exist without demonstrable cell alteration; more often it is symptomatic of distinct lesions, but it means that the organ is unable to fulfil its normal functions. The functions of the liver may be divided into four groups:

1. Circulatory. The liver destroys the erythrocytes, playing the part of a regulator to the composition of the blood. It holds iron in reserve, obtaining it from the destroyed cells and from the food.

2. Glycogenic. The liver forms and

holds in reserve the glycogen, controlling the carbohydrate nutrition; it also controls the proteid and fatty metabolic processes.

3. Antitoxic function. The liver forms urea from ammonia, forms and destroys uric acid, forms the sulphoconjugations of the phenols; it arrests and modifies toxic substances, usually by oxidation, being the organ in which the most active oxidative processes occur.

4. Biliary function. The liver forms a secretion—the bile, which may be considered both an excretion and secretion, as it contains the bile salts, glycocholate and taurocholate of soda, which are necessary for intestinal digestion, while the bilirubin and other substances are excreted into the intestine for elimination.

Of these four groups of functions it is evident that one or more may be deficient, and to treat any case it is of importance to decide which function is insufficient. Physical examination gives little or no help in the differentiation. Antemortem examination of the bile is impossible except in cases of fistula, and it is to the urine and feces that we must look for the data necessary for a diagnosis. The following are the points to be examined to determine the nature of the hepatic insufficiency: Alimentary glycosuria, hypozoturia, ammonuria, hyperazoturia, urobilinuria, indicanuria, intermittent elimination of methylene blue, the oxidation of sulphur, the conjugate sulphates, uroerythrin, and hippuric acid. The feces should be examined for fat, bile pigments, and undigested proteid.

Alimentary glycosuria, first studied by Claude Bernard, followed by Robineau, Roger, Hanot, Gilbert, Reynaud, and others, as a pathologic condition, is usually tested by the administration of 200 grams glucose or levulose syrup. Should the urine contain sugar, giving Fehling's reaction, the

Grippe, even in cases beginning as trivial seizures should always be regarded with suspicion and apprehension.—Cobleigh, *Med. Age*.

Children's Bronchitis: In severe cases the drug of unfailing, universal efficacy, is aconite.—Winters, *Merck's Archives*.

glycogenic function of the liver is affected. The value of his test as evidence of general hepatic insufficiency is disputed; Roger found the test positive only in 6 out of 10 cases of insufficiency, Surmont in 10 out of 15, Bierens and Haan in 18 out of 29, Reynaud and Olmer in 11 out of 30, Maury in 16 out of 53 cases. In atrophic cirrhosis Valmont found the test positive in 1 out of 7 cases, Mehning in 2 out of 9, Frerichs in 2 out of 19 cases of phosphorus poisoning. These figures show that in hepatic insufficiency the glycogenic function is impaired in about 40 per cent of the cases, and in atrophic cirrhosis in about 16 per cent.

The test for urobilin in the urine is easy and should never be neglected. The filtered urine is heated with a little ammonia and a drop or two of zinc chloride added; if urobilin be present a green fluorescent coloration appears. A more complicated test is to saturate the urine with ammonium sulphate and dissolve the precipitate in alcohol; a reddish-brown colored solution is obtained, which can be tested with ammonia and zinc chloride solutions or with the spectroscope. The latter can also be used with the fresh urine, but is too delicate, as small quantities are detected which are not pathologic. The question as to whether urobilin is formed in the intestine or in the liver is still a matter of dispute. Hayem says that urobilin is the pigment of the diseased liver, and states emphatically that it is never found in the urine except in cases of hepatic insufficiency. Vires considers that clinically the presence of urobilin in the urine is definite proof of hepatic disease, and that it is of secondary importance where it is formed; he considers urobilin the pathologic and bilirubin the normal excretion of the liver.

Indican is found in small quantities in normal urine; in excess it is associated with

hypochlorhydria, sometimes with hyperchlorhydria, with the presence of pus in any part of the body, in Asiatic cholera, cancer, typhus, and constipation; it is probably of intestinal origin, but the liver takes an active part in its formation. It is present in excess in most hepatic diseases, but is not an absolute sign of hepatic insufficiency; it should be regarded as one of the toxins which produce the disease.

The elimination of methylene blue is a test which is difficult to carry out, at least in private practice; it consists in injecting 0.05 gram of the methylene blue in 1-20 per cent solution and watching its elimination in the urine. Under normal conditions the coloration of the urine is regular, increasing to a maximum, and then diminishing. In patients suffering from hepatic disease the coloration is irregular, alternating in depth of color. In severe cases the coloration may be intermittent.

Hypoazoturia is the result of the failure of the liver to form urea from the carbonate and the carbamate of ammonia, consequently the proportion of the total nitrogen eliminated as urea is reduced and the ammonia increased. The methods for the quantitative estimation of urea and ammonia are complicated; Follin's method is best, but tedious for general practice.

Under normal conditions the amount of nitrogen eliminated as urea should be about 82 to 95 per cent of the total nitrogen; in cirrhosis the percentage of urea nitrogen may be reduced to 73 or 79 per cent, in jaundice from 50 to 70 per cent, and yellow atrophy from 40 to 60 per cent.

The urea function of the liver can also be tested by injecting from 5 to 6 grams of ammonium acetate into the buttocks; the ammonia is converted into urea under normal conditions, but is eliminated as ammonia if the hepatic function is impaired.

Nephritis: In a recent case a blood pressure of 247 mm. was reduced 50 points in a few days by aconite with great benefit.—A. R. Elliot.

Injecting paraffin for nose deformity Uhtoff noted sudden blindness from embolism of central retinal artery.

A certain proportion of the sulphur is eliminated not fully oxidized to sulphate; if this proportion is increased it is evidence of imperfect hepatic function, the liver being the organ in which the most active oxidizing processes of the body are carried out. The proportion of neutral sulphur to total sulphur eliminated under normal conditions is from 10 to 12 per cent; in hepatic insufficiency it may be increased to 40 per cent. This is considered by many to be one of the most important of all tests for diagnosis.

Roger and Garnier introduced a solution of dihydrogen sulphide into the rectum; under normal conditions the gas is returned by the liver, but in hepatic insufficiency it is eliminated by the lungs, the expired air blackening paper wet with lead acetate solution.

Uroerythrin is the bright pink color so often seen in the brickdust sediments of urine; it occurs in acute diseases of the respiratory system, in acute rheumatism, and in gout. It is probably only in the latter case that it can be considered as evidence of impaired hepatic function.

A diminution of hippuric acid is said to be a symptom of hepatic deficiency, but as only 0.3 to 0.4 gram of hippuric acid is eliminated normally in the twenty-four hours it cannot be a test of great value. The presence of small quantities of bile pigment in the urine, which can be tested for very easily by means of Rosin's test, is almost positive proof of a congestion of bile within the liver. The examination of the feces is not as often carried out as it might be; absence of bile or disease of the biliary duct causes the acholic stool, and also increases the amount of fat. Especially in infancy and childhood is the pale stool of diagnostic import, it being positive evidence of an inefficient liver.

White has enumerated 68 native plants that cause dermatitis in susceptible persons; rhus being best known.—*Med. Herald.*

The toxicity of the urine has been demonstrated by Bouchard and his pupils. As the liver is the guardian of the body against intoxication, hypertoxicity of the urine may be considered as a sign of impaired hepatic function, but the methods at our disposal for testing the toxicity of the urine are unreliable.

There is a condition of hyperazoturia in which the elimination of nitrogen by the urine is enormously increased—not those conditions of hypercritical elimination which occasionally occur owing to some retention, but conditions in which the daily average elimination of nitrogen reaches 15 to 20 grams or even 25 grams. In these cases the percentage of urea nitrogen may be normal or even above normal. Cases are on record in which the percentage of urea nitrogen was as high as 98. The neutral sulphur is also diminished to less than 10 per cent of the total sulphur. In these cases there is probably a hypersecretion of bile, but this is difficult to prove. On physical examination the liver is usually large, hard, and tense. This condition occurs in gross feeders, the liver being stimulated to over-exertion, necessarily followed by cell fatigue, with consequent hepatic insufficiency and atrophic cirrhosis.

In the treatment of hepatic insufficiency it has to be remembered that any one of the functions may be insufficient, and therefore it is of importance that they should be differentiated by the foregoing tests, which will show the condition of the glycogenic, the biliary, the urogenic, the antitoxic, and oxidative processes.

There are a certain number of drugs which are used in hepatic disease somewhat empirically, no pharmacodynamic study having as yet been made of their action excepting in cases of natural or artificial biliary fistula. Opothrapy of the liver has not so far

Euonymin is said to be an excellent remedy for prostration with irritation of nerve centers.—*Med. Herald.*

received much attention. Carnot, Gilbert, and Danis claim to have had good results from the use of liver extracts in atrophic cirrhosis, they having observed an increase in the biliary, urogenic, glycogenic, and probably also in the antitoxic functions. Spillman and Demange found that the albumin and urobilin disappeared from the urine. Carnot and Gilbert macerated 150 grams of fresh pulped pig's liver in 250 cubic centimeters of warm water for twenty-four hours, and administered it by the rectum with good results. Gaillard and Crequy administered 150 grams of pulped liver by the mouth, which gave good results, the active principle apparently not being destroyed by the gastric juice; but it was too nauseous for most patients. There are preparations of powdered liver on the market, but they often produce stomach trouble.

Robin has studied the action of drugs in the treatment of hypertrophic cirrhosis in its early stages. Opium in small doses diminishes the glandular and digestive secretions, and is indicated in cases in which a hyperactivity of the stomach exists. Belladonna inhibits the functions of the liver, according to Riegel, Pawlaw, and Haidenhain. Arsenic in small doses has a sedative effect upon the action of the liver, especially in the glycogenic function, but its use for any length of time is contraindicated owing to its tendency to produce fatty degeneration. Mercury in small doses is a hepatic sedative; it does not increase the formation of bile, but stimulates Auerbach's plexus. Antipyrin and the bromides are also hepatic sedatives, and are especially indicated when the urea elimination amounts to 0.5 gram per kilogram of body weight. They should be administered in about 10-grain doses before meals, with a little sodium bicarbonate to prevent irritation of the stomach, and should be discontinued as soon as the

urea elimination has reached normal. Sulphate of copper and lead acetate are also useful in hepatic hyperactivity. Potassium iodide in doses of 5 to 10 grains per diem is valuable, but the doses must be small, as the stomach in these cases is susceptible to its disturbing action.

Hepatic stimulants are more numerous and a little better known—benzoate of soda, salicylate of soda, *Peumus boldus*, sodium phosphate, aloes, *jaborandi*, *podophyllin*, and gamboge. Potassium iodide acts indirectly by dilating the blood-vessels and increasing the circulation. Benzoate of soda stimulates all glandular secretions, as also does sodium salicylate, the latter increasing the quantity of bile according to some observers. *Peumus boldus* is given as an infusion [Its alkaloid, boldine, is also much used.—ED.]; its principal action is diuretic, but it is also used to stimulate the liver. The action of sodium phosphate upon the liver is affirmed by Rutherford, but denied by Prevost and Binet, Baldi and Stadelman. Aloes in small doses is a hepatic stimulant, as is also *podophyllin*. *Jaborandi* in small doses is said to stimulate the liver, as it does all other glands; in doses of 1 to 2 grains of the powdered leaves it acts upon the liver and does not provoke diaphoresis and salivation. Sodium glycocholate mass in doses of 15 grains per diem stimulates the liver cells, increasing the flow of bile, thereby removing accumulated waste products, especially bilirubin. In cases with the icteroid coloration of the skin it will clear up the complexion in a few weeks. Especially is it indicated in hepatic colic; many cases are on record where its continued use has prevented the attacks of colic permanently.

The diet in diseases of the liver is of great importance, the guiding principle being to obtain the maximum amount of nutrition

Again we have learned of the perfect satisfaction afforded by Wagner's mica plate machines after long use.

In gastric cancer digestive leucocytosis is usually absent; with ulcer of the stomach it may be present.—Clopton, *St. L. Med. Review*.

with the minimum amount of physiologic work, thereby giving rest to the organ. Proteids are necessary for the proper nutrition, but in much smaller quantities than generally taken: Chittenden has shown that nitrogen equilibrium can be maintained in health with an intake of about 6.0 grams of nitrogen per day. The products of proteid metabolism—urea, ammonia, uric acid, creatinin, etc.—are more or less toxic and entail considerable physiologic activity on the part of the liver as well as upon the kidneys in their elimination. Fats are for the most part absorbed by the lymphatics, only a small quantity entering the liver by way of the portal vein; except in the suppression of the biliary secretion the easily digested fats, such as cream, butter, and the vegetable oils, are well borne in moderate quantities. The carbohydrates give but little work to the liver, their end products being principally carbon dioxide and water, both of which are easily eliminated.

The diet in hepatic insufficiency and hyperactivity should be moderate in quantity with a minimum of proteid, say about 6 grams of nitrogen per day, with some little fat administered in the form of cream, fresh butter, or olive oil, and sufficient carbohydrate to bring the total diet to about 10 calories per kilogram of body weight. The meat should be well cooked, preferably red meat, white meats containing more nuclein; gelatinous dishes, as calves' head and feet, etc., are to be avoided. Boiled fish, avoiding those containing much fat, are allowed, but shell-fish are debarred. One or at the most two eggs a day may be given, except in gallstone cases, when the cholesterin contained in the yolk may cause increased elimination by the bile. This is, however, very doubtful; experiments seem to prove that cholesterin is not absorbed from the intestine as such.

Cholin, like the x-ray, is a leucotoxin, a fall in the leucocyte count occurring five hours after its injection

Milk, the diet usually prescribed, is not satisfactory and should never be given except with desserts. Fresh cheese may be given and is sometimes well borne, but only in small quantities. Of vegetables, peas, beans, scorzonera, salsify, and salads are the best; spinach and tomatoes contain too much oxalic acid. Vegetable diet increases the alkalinity of the plasma and often relieves the constipation, producing bulky stools. Vegetables containing sugar are only tolerated in small quantities, with the exception of Irish potatoes, which should be well boiled and mashed with butter. Toasted bread may be given, but pastry is forbidden; ripe or cooked fruits may be given sparingly. Water or very weak tea are the best drinks; the water should preferably be distilled, in which antisclerosis tablets (four to the pint) have been dissolved, this assisting in the elimination of the waste products. The total fluid taken in the twenty-four hours should be at least 1,500 cubic centimeters. In some cases all the meat should be boiled so as to dissolve out the extractives; no soups or broths should be taken. Probably more than anything else the reduction in the quantity of the food is the greatest therapeutic agent, most patients being or having been great meat eaters.

The following prescription is of value in atrophic cirrhosis: Strychnine sulphate, gr. 1-60; pulv. foliae jaborandi, gr. 1; sod. glycocholate mass, gr. 5; to make one capsule, t. i. d. Nitrohydrochloric acid is often beneficial. In hypertrophic cirrhosis, acetate of potash and nitrate of potash are of value in one or two-grain doses. In hepatic colic sodium glycocholate mass in five-grain doses rarely fails to prevent a second attack if taken continuously.

Baltimore, Maryland.

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Too little attention is given to hepatic

The high school curriculum drives the lazy boy to work and the girl into nervous prostration.—Armstrong.

therapeutics. Prof. Richardson's article is therefore peculiarly welcome and his suggestions very timely. We heartily agree with him concerning the value of the bile

salts, though we have found much smaller doses equally effective. Boldine is another remedy of great value, which is not half appreciated.—Ed.

THERAPEUTIC NIHILISM VS. THERAPEUTIC POSITIVISM.*

BY C. F. GILLIAM, M. D.

IN selecting this topic for discussion I do not want you to think that it is my purpose to deal with it in an abstruse or scientific way, but purely, as I conceive it, from a plain common-sense standpoint. Neither is it the writer's desire to pose as a skilled therapist, nor as one having more than the average knowledge of therapeutic agents.

I have noticed, however, with much concern, a growing tendency, on the part of many medical men during the past few years, towards therapeutic nihilism, and I desire to enter my protest against it.

This tendency is especially noticeable among surgeons and those who devote themselves to research along other lines than that of therapy.

To judge from the expressions of this latter class, both in speaking and writing, one would be led to the belief that the only desirable qualification of a physician, is to learn the disease from which a patient is suffering and what are his prospects of dying. Diagnosis and prognosis are the *summum bonum* to be expected from the doctor, according to their idea, ignoring the fact that there is no excuse for the existence of physicians except for the prevention and cure of disease and relief of suffering.

While it may be a great satisfaction to the profession for a patient to die according to

rule, it is no special comfort to the family and to the patient himself. He seems to be just as dead and stays dead just as long as if his case had not been properly diagnosed and prognosed.

When some enthusiastic member of the fraternity tells how he cured a patient with a certain kind of medicine, one of these "wise guys" will look at him with a sort of pitying contempt and say patronizingly: "You mean the patient got well while you were giving him the medicine." Intimating that the patient recovered in spite of the medicine instead of because of it.

Many of the younger men of the profession, of the ultra scientific type, ape some of the older ones in this respect, in order to show how conservative they are and that *they* are entirely too well balanced and broadminded to allow *their* enthusiasm to run away with their common sense. It is possible that in their cases the patients do recover in spite of the treatment. A man holding such belief cannot in the very nature of things be a good therapist. He lacks the temperament, the fine sense of discrimination in the use of medicines that is a part of the good therapist's armament. He is wanting, too, in the power of suggestion which the natural physician—often unconsciously—exercises, and which is such a potent factor in the cure of disease. I am firmly of the belief that the confidence with which medicines are used has much

*Read before the Columbus, O., Academy of Medicine, May 7th, 1906.

We seem to be neglecting the essential, practical part of medicine, the art of healing.—Speier, *Wis. Med. Rec*

Strychnine: Barwell treated effectively cases of chronic infantile palsy, by strong solutions, as much as gr. 1-6.—Phillips, *Med. Brief*.

to do with the result. I freely acknowledge that many of these nihilists may have more text-book knowledge of the properties of many drugs, than his optimistic brother who uses them to so much better effect.

Our scientific, therapeutic, nihilistic friend Osler, has added much to our knowledge of the character of disease, but little to our knowledge of the cure of disease. I'm glad he has left us. I have been afraid I might get right sick some time and that they would call him in consultation. I would so much rather have a good cheery country doctor. I know this is hard on Osler, possibly more than he can bear, but I trust that any one imparting my opinion of him, to him, will break it gently. Otherwise the shock might be so great that he would immediately seek the chloroform bottle, thinking that his days of usefulness were o'er.

But to return to my subject, I would not have you think that because I believe that suggestion or mental influence is such a powerful factor in the cure of disease that I am a Christian scientist. There should, in my belief, be a combination of the mental influence and physical means to secure satisfactory results. Outside the field of surgery, however, I can see no reason why the therapeutic nihilist should find fault with the Christian scientist. They are probably both frauds and humbugs, but some of the Christian scientists have the advantage of being honest in their beliefs. It has always been a mystery to me how a man can be conscientious and continue the practice of medicine when he has no faith in its curative power. And yet I have often heard doctors of supposedly good character, say they did not believe, or doubted very much, that any case of disease had ever been cured by medicine. Some of them are liberal enough to make exceptions of syphilis and malaria.

Speaking for myself, I am proud to say

that I am not a therapeutic nihilist, but rather a therapeutic optimist.

If such a declaration evokes the pitying sneer, "That it is the optimism of ignorance," still, I would rather live my life and die in the belief that I had relieved suffering and benefited humanity by the cure of disease, than to live and die with the feeling that my life had been that of the confidence man or bunco steerer. If it were a question of choice, I would rather be classed as an honest ignoramus than as a smart rascal.

These may seem like pretty strong statements, but there are times when a rattling of the dry old scientific bones is needed. Give us live virile bones, covered with good red flesh and blood, instead of these old musty, dried up, dead ones.

I do not want to decry the student, the man of research; all honor to him, but he must not think that all knowledge lies hidden in the womb of the future and that nothing worth while has been discovered in the past. Neither must he think that all the wisdom lies in the medical schools and biological laboratories, where only cursory attention is given to therapeutics. Indeed, there are medical colleges in this country which have no chair of therapeutics, though curative and preventive therapeutics should be the sole aim of the profession of medicine.

Many of the advances in therapy have come from outside the teachers of medicine—indeed, most of them, like the Pharmacopeia, do not accept anything new as having virtue till it has been demonstrated about ten years, and consequently are always about a decade behind. "Hold fast to that which is good," is an excellent motto, but it ought not to prevent one from grabbing hold of every good thing that comes along. This business of climbing over the tail board of the band wagon after nearly everybody else is aboard, is a bad habit, to say the least.

In anesthesia of functional character the good effects of strychnine are often very marked.—Phillips, *Med. Brief*.

In tremors and ataxic movements of certain kinds strychnine has proved useful; as in chronic alcoholism.—Phillips, *Med. Brief*.

As Bill Nye would have expressed it: "They ought to open the top of their think tanks and allow a few ideas to percolate in occasionally."

Do not get the impression that I have an idea that we have arrived at the millennium in medicine. It is my belief that there are still vast unexplored and fertile fields for discovery and new and better methods to be found for doing the old things, but I am not one of those who believe that all the experience and research of the past ages have been valueless for the amelioration of disease and human suffering. We will probably make great advances in medicine, as we will in the manufactures and arts, but what we have already accomplished in this direction is not to be sneezed at.

As every one is aware, we have both a spiritual and a physical body, and they are interdependent, or mutually dependent upon each other. Neither can functionate nor exist without the other. For that reason I think that in therapeutics we must depend upon both spiritual and physical agencies for the cure of disease.

I liken an individual to the trolley car. The electric current is the spiritual body—unseen and incapable of analysis; the car and track is the physical body. You can stand on the track and turn on the current and you won't move a peg; you can take your seat in the car and unless the current is turned on you are equally at a stand-still, but connect the current with the car—the spiritual with the physical body, and you move through space. It is the law of nature, it cannot be controverted. And this is my answer to both the Christian scientist who believes only in mental influence and to the man who has no belief in the power of suggestion.

Some of you may say, that in the case of the human being, the current is never dis-

connected and that consequently the spiritual agency is the predominating one. You forget, however, that the car wears out by use and that it is not repaired by the current, but by physical means and that the current itself is also kept going by physical agencies, so that on the whole the physical help seems the most important in carrying on the economy of life. But we must not forget, either, that as the electric waves are caught by one wireless telegraph station from another, when attuned in unison, so the electric ether passes from one body to another in affinity with it.

In the domain of vegetable drug therapeutics the medical profession owes more to the eclectic school than to any other, and I am glad to extend to these gentlemen my appreciation of their good work, though I confess that only a few years ago I looked upon them with something akin to contempt. So, too, with our homeopathic brother. The more liberal I become in my regard for the different schools, the more good I can see in their systems. Indeed, in serotherapy, which probably holds more promise for profitable exploitation than any other, we are virtually adopting, only one remove distant, the homeopathic doctrine of "like cures like." We all act upon that principle in many diseases, and, if we could get together on the dosage, could travel along in double harness very nicely.

In my opinion the most striking advance in drug therapy in recent years has been in active-principle medication. It should not be construed, however, that those who make a specialty of this use nothing else, for they avail themselves of every definite chemical compound as well as all other agencies for the cure of disease which they think will be effective. In other words, they are eclectics in the true sense of the term. In addition to using from choice the active principles,

In the latter stages of chorea, due to fright or beginning puberty rather than rheumatism strychnine is often of use.—Phillips *Med. Brief*.

In epilepsy when bromides depress too much, strychnine acts beneficially in certain cases, combined with them.—Phillips *Med. Brief*.

i. e., the alkaloids, resinoids and glucosides in preference to the galenical tinctures and fluid extracts, they have formulated two or three certain well-defined rules or principles for their guidance. These are: "Clean out, clean up, and keep clean," and "Just dose enough."

Many have the idea that the alkaloids, being so powerful, are dangerous drugs to use. It is just the contrary. Being of definite strength, you know just what you are using and how to use it. How different the tincture or extract which may contain one per cent or five per cent of the active principle.

Many others, too, think that the alkaloidists use such infinitesimal dosage as to be closely allied to homeopathy. There is just where our, "Just dose enough," comes in. We use just sufficient to secure the effect desired, whether that be the one-hundredth of a grain or 100 grains. I would not hesitate to use 100 grains of quinine in a case of pneumonia, if I thought it would be safe and effective. As a rule, however, we begin with a minute dose, repeat it frequently, till we get the effect desired and learn the tolerance of the patient to the particular drug given, and then continue it in such sized doses and at such intervals as seems indicated.

I have now been a user of the active principles for about five years, and the longer and more I use them, the greater my faith in their curative power. I mean by this that the patient not only gets well after the disease has run a much milder course, with an absence of many of the distressing symptoms that we used to expect in such diseases as typhoid and pneumonia, for instance, but that a large proportion of them are cured, or seemingly aborted, in from one-half to two-thirds the time that is considered the classical course in such diseases.

And when I say this, I am fully alive to the fact, that there is an optimism that makes men ridiculous, just as there is a pessimism that stops all progress.

I know that many physicians consider alkaloidal medication a mere "fad" which has been brought into vogue solely through advertising boosting. If a thing is a good thing it is no less valuable because advertised. It is a fact, however, that most men approach this system of treatment in a spirit of skepticism, and if it had no virtue, this method would long ago have been discredited. As a matter of fact, it is growing all the time, and those who use the active principles the most are its most enthusiastic advocates.

Why should not definite principles, whose physiological actions are known, be more effective than a large mass of stuff, much of it mere trash and inert, or may be containing antagonistic principles which retard or possibly nullify the action you are trying to secure?

"But," says one, "if there is virtue in a plant it is in the whole plant. Nature in her unsurpassed laboratory has produced these things just as they ought to be used."

Has not Nature also distinguished between man and the beast, by giving us the power and intelligence to extract from Nature's laboratories those things which are most useful to mankind? I grant you that Nature, in some instances, may produce some things in just the state they ought to be used.

If we must go back to Nature in the use of drugs, why not in all things else? Why not go without clothes and shelter, save that of trees and of caves?

If you wanted a sky scraper, a buggy axle or a surgeon's knife you wouldn't expect to make them with a pile of iron ore in its native state. It is probable that you would

In impairment of the nervous apparatus of sight and hearing strychnine is useful. Amaurosis and amblyopia.—Phillips, *Med. Brief*.

Wyatt Wingrove in deafness from smoking strong tobacco finds strychnine in full doses successful.—Phillips, *Med. Brief*

send it to a furnace where by fluxing it with coal and limestone, thereby removing its impurities, and incorporating with it certain molecules of carbon and other substances, you would secure steel. One of the most useful articles on the face of the earth, and yet something that does not exist in nature.

If you wanted some butter or cheese you wouldn't eat a cow, hide, horns, hoofs and all to get it. If you felt the need of a little alcoholic stimulant—merely as a bracer, of course—you wouldn't go out and chew up a corn stalk, together with the corn, cob, husks and leaves.

I'm inclined to think that these "back to Nature" fellows would be in a bad way to secure their tinctures, embodying all the virtues of the plant if they did not use one of the distilled active principles of corn with which to extract its virtues.

Therefore, I contend that the more minutely we can separate the active principles of the vegetable and mineral kingdoms, and discover the action they have on the human

system in health and disease, the more advance we are making in the domain of therapeutics and in the cure of disease. And thousands of practitioners agree with me.

To those who believe there has been no advance in therapeutics in 4,000 years, let them hug the comforting delusion to their souls. For *it is undoubtedly a comfort to have some belief.*

For those who do not believe in alkaloids and would throw away quinine, morphine, aconitine, atropine, cocaine, veratrine, digitalin, hydrastine, strychnine, pilocarpine, scopolamine, hyoscyne, hyoscyamine, etc., and go back to the crude galenical preparations, we can only say, "Go your way and God speed you." There always has to be some one to bring up the tail end of the procession, and if we who are heading the advance guard do meet with a few more repulses and casualties in our onward march, we will at least be the first to reach the promised land. If there is any such a land.

Columbus, Ohio.

THE ACUTE DISEASES OF CHILDREN.

BY GEO. H. CANDLER, M. D.

V. DIPHThERIA, ERYSIPELAS (CONTINUED).

INTERNALLY, the first thing is to give blue mass and soda, gr. 1-2 to 1 and podophyllin, gr. 1-2 to 1-6, hourly for six doses (dose according to age) and to follow the last dose in two hours with a saline draught. Every hour the child should be given echinacea, two tablets and calcium sulphide, gr. 1-3. Every three hours, nuclein gtt. 6 to 8, either under the tongue or hypodermatically. Give three times daily (preferably after such food as may be given) the

arsenates of iron, quinine and strychnine as a general tonic. Add to this any particular drug which may be indicated in the particular case under treatment. For two days the sulphocarbolates (preferably in solution) must be given (dose according to age) every four hours—grs. 5 to 10 usually suffice. This is the early treatment and it alone will often prove all sufficient, a few doses of aconitine or gelsemin being also required perchance for any hyperpyrexia present. The cleanliness

In neuralgias of various kinds strychnine has often proved most successful; visceral, mild angina pectoris, gastralgia.—Phillips, *Med. Brief.*

In weak heart strychnine proves an excellent tonic, sometimes the first to do good in fatty heart.—Phillips, *Med. Brief.*

and forced activity of bowel, kidneys and skin will enable the system—aided by the nuclein exhibited—to dispose summarily of the limited amount of toxins we allow the invading bacilli to produce. If antiseptic vapor or air is inhaled constantly and the affected parts are constantly attended to, the systemic conditions cannot become very serious. Calcium sulphide and echinacea amply provide for such septic conditions as may exist.

The food must however be from the first most nutritious but fluid. Albumen water, beef juice, predigested cereal gruel, bovine, trophinine, beaten egg-yelks with grape juice, malted milk, etc., are to be given every three hours in sufficient quantity.

ANTITOXIC SERUM.

It might be well to briefly consider here the use of serum. The various antitoxins upon the market vary little, if any, in their efficacy, but the most important firms offer their products in ingenious syringe containers and the doctor is apt to be to some extent governed in the matter of dosage by the contents of package used. This is a serious error, the condition of the patient and stage of disease being the only reliable indications. The *mildest* cases require 3000 to 5000 units (the "unit" being an arbitrary measure representing that quantity of serum which will protect a guinea-pig weighing from 250 to 300 grams from 100 times the usual fatal dose of diphtheria toxin) and a well-marked case will call for 7000 to 8000 units; laryngeal cases should *always* receive the latter amount. If the child is *under two* years of age at least 5000 and probably 6000 will be called for under above conditions. In very severe and advanced cases in patients over ten years old 10,000 units may be exhibited and the dose repeated in from six to eight hours. If we are to receive

any benefit from antitoxin, we must use full doses at the earliest possible moment. A good rule is: "Advanced cases require double doses."

If an ordinary syringe is used it must be sterilized by boiling and the needle should be first dipped in carbolic acid and then into alcohol. The instrument should hold at least 5 Cc. The skin under the shoulder blade, over abdomen or gluteal region is cleaned *thoroughly* (when the patient is very young the back should be chosen so that the needle is not seen) and the cleansed needle entered with a quick thrust. The serum is slowly injected and, when the required amount has been inserted, the needle should be withdrawn and the finger tip, protected with cotton soaked in an antiseptic, pressed over the orifice. The puncture should be promptly sealed with collodion and a piece of gauze or cotton. The "syringe containers" are supposed to be sterile, but the needle should always be disinfected as above.

The action of serum is evident (when effective) as a rule within twelve hours; there is diminution of the fever, the child feels and appears better and the membrane stops spreading and begins to loosen and shrivel. Local edema (even when so severe as to seem to necessitate intubation or tracheotomy) subsides and the case comes well under control. Sometimes a third full dose is needed to produce such results. All these conditions however should be absent under alkaloidal treatment and diphtheria cases, treated as described from the beginning, rarely become alarming. Systemic antiseptics and destruction of bacteria and toxins can be secured in more than one way, and the physician, by instituting rational therapeutic measures, obviates the necessity for injecting antitoxin, preventing,

Strychnine is of the utmost value in the failing heart of acute diseases, more especially lobar and bronchial pneumonia.—Phillips, *Med. Brief*.

Strychnine is probably one of the most powerful respiratory stimulants we possess, hence its good effects in pneumonia.—Phillips, *Med. Brief*.

to a great extent, the production of toxins by rendering the system inimical to the growth of the bacteria. A "clinically clean" patient, saturated with calcium sulphide and possessing the ability to secrete and excrete normally, will, if given nuclein in proper doses, be perfectly able to dispose of such bacteria as are able to withstand local therapeutic measures, as well as the toxins they are able to produce!

Enemata of normal saline solution are useful daily and while serving to insure a really clean bowel aid the system generally, a certain amount of the fluid being absorbed.

The writer has found it an excellent plan to give children tablets of papayotin to suck; this agent dissolves the membrane slowly but very positively and when the gargle and spray are given we get a very clean throat. If the nose is affected insufflate the powdered drug; in later stages, where the membrane is troublesome, I like a solution of mercury perchloride in alcohol (one per cent); this is applied by means of cotton on a wooden applicator, or a sponge may be used. For very small children an aqueous solution (1 to 500) will serve nicely. The stronger solution is however the most effective. If the nose of the child is pinched and a small block of wood or a folded handkerchief is forced between its teeth, when the mouth opens one assistant can, by placing a wide towel about the patient's body, control any struggles and the application can be made as it should be. *Half the cases die because they are not properly attended to.*

The efficacy of iron perchloride in diphtheria is acknowledged, but the greater part of the benefit is derived from the local action of the solution when swallowed. The arsenates will give even better constitutional effects.

The heart will require close attention in every case and after the second day it is well

to exhibit cactin, gr. 1-67, every four hours. If the arsenate of strychnine is being exhibited this drug may well be given at the same time. *Helenin* is gradually being recognized as an invaluable remedial agent in diphtheria; in nasal and laryngeal cases especially it gives prompt results. It may be combined with calx iodata, gr. 1-3 four to six granules being given four times a day.

In nasal diphtheria the nares must be cleansed well with the creolin and magnesium sulphate solution, then sprayed with H_2O_2 and irrigated with a hot boric acid solution, then (unless it be a very mild case) a solution of glycerite of carbolic acid, drs. 6, sodium bicarbonate, grs. 60, hot water, ozs. 8, should be sprayed into each nostril thoroughly. This solution may well be used with one of the steam atomizers on the market. It is extremely useful in laryngeal diphtheria. The writer has had excellent results in severe nasal cases with ichthyol, drs. 2, iodine (tr.), drs. 1-2, glycerite of hydrastis, dr. 1, glycerin ozs. 4. This solution is applied from a coarse spray atomizer (it may be diluted if necessary) or better with cotton wrapped upon a slim wooden rod. Aluminum applicators are also of service here. The operator must work in a good light and be careful to reach between the turbinated bodies and well into the posterior nares. There are numberless other solutions upon the market under fanciful names and formulæ are offered without number but none of them will give better results than these which meet every indication.

Serious conditions and complications should not arise and do not do so when the case is taken early and properly attended to. Brucine (or strychnine) must of course be pushed in full doses if cardiac failure threatens; camphor may also be used, or musk per enema. Digitalin is called for when renal action is poor; barosmin, gr. 1-2 to 1, may be

In dyspnea dependent on heart disease, chronic bronchitis or emphysema, strychnine has been praised.—Phillips, *Med. Brief*.

In atony of the bladder, incontinence, retention, strychnine is sometimes employed with much benefit.—Phillips, *Med. Brief*.

given with gr. 1-67 digitalin every three hours for twenty-four hours. Paralytic symptoms and multiple neuritis cannot occur unless the system is overwhelmed with toxins and we do not allow this to happen. Otitis and the severe sloughing occasionally seen never present under this method of treatment.

During convalescence the patient requires to be carefully watched; death has come suddenly two weeks after supposed recovery subsequent to over-exertion. There is no better tonic than the three arsenates with nuclein. The prepared bovine blood-foods may well be exhibited for at least one month. Fresh air, moderate exercise, daily stool, and a full salt sponge bath, will also suggest themselves.

Throughout the disease and convalescence I make it a practice to give a morning saline draught. Children can take this in the form of "lemonade;" older patients may dissolve the saline in a little cold water, swallow it and then drink a glass of hot water. It is not usually well to give *cold* draughts in these cases early in the day. A good way to give the saline to young children is this: Dissolve two teaspoonsful of the effervescent magnesium sulphate in half a pint or so of distilled water, add a little lemon juice, two drams of simple elixir, and a tablet of saccharin; another of carmine will make it pretty enough to tempt the most "pernicketty" child. For infants the gr. 1-10 calomel with aromatics tablet proves ideal. Other granules may be flipped into the throat and a few swallows of water given. Barley water made thin with lemon juice added is the best possible drink during the whole attack. There will rarely be any renal complications when it is used.

In collapse caffeine dissolved in a solution of sodium benzoate may well be used but a granule of glonoin will act faster and almost as well.

In diurnal spermatorrhea, impotence, connected with relaxation of the genitals, strychnine is effective.—Phillips, *Med. Brief*.

INTUBATION AND TRACHEOTOMY.

Either or both procedures may be necessary in laryngeal diphtheria and the writer has, from time to time, urged the physician to perfect himself in their technic. An intubation set should be in the possession of every general practitioner; it should moreover be looked at occasionally and kept in perfect order. It is not easy to pass the tube in a struggling, perhaps moribund, child and unless the operator has become expert beforehand he will be very apt to fail. *Tracheotomy* may be demanded at any moment, and the doctor should be able to do the work with a sharp knife, the rounded end of a pair of scissors, bent hairpin, and a rubber band. But cleanliness is essential—and *care*. If you *have* to do a tracheotomy and time presses, put your knife and a pair of small scissors (these should be in your pocket or case) into boiling water (with carbolic acid or other antiseptic added if possible) or, in dire emergency, run them through a flame, and wipe clean upon cotton soaked in alcohol or *coal oil*. The latter is an excellent bactericide.

Have the child held firmly in one person's arms with a towel wrapped well about the body, restraining the arms, and have the neck bared, and the head bent backward so as to render the tissues over trachea tense. Wash off the skin with hot water, dry, paint the line of incision with pure carbolic acid, neutralize with alcohol (always have a vial of each with you) and go ahead with your incision through skin and subcutaneous fat; one stroke will do it; if any veins are in the way they will now be seen and may be caught up and tied or pushed out of the way with the round pointed scissor blade; if you *have* a pair of forceps catch the vessels on each side and cut through be-

There is no better medicinal means of combating collapse and shock than the hypodermic injection of strychnine.—Phillips, *Med. Brief*.

tween them; tear through the fascia and expose the trachea; if hemorrhage is free make pressure on each side of incision (you can do it with two fingers or any sane person present can make pressure for you) sponge up the blood and cut through two or three rings; entering the point of knife between the lowest two and cutting *upwards*. As a rule bleeding will promptly cease. Now, if you have a tube insert it, if not, use a hairpin bent and *sterilized* previously, thus: Make a *small* ring at each end then bend back each ringed arm, flaring the bent portion outward a little; now slightly curve the long arm double-wire, and attach a piece of elastic or a rubber band to one ring. The curved long blade is inserted into the trachea, the rubber passed round the neck and the free end fastened to the

vacant ring on opposite side; enough traction being made to keep the orifice open.

Before going to treat a diphtheria case the doctor should refresh his memory upon the subjects of Tracheotomy and Intubation. There is, on the market, an instrument called the "Bloodless Tracheotome," fashioned on the trocar and canula pattern and this is, perhaps, the ideal emergency instrument, as it can be inserted instantly and safely. Excepting in the most *desperate* cases, before doing tracheotomy or intubation use apomorphine hypodermatically and H_2O_2 locally—it may save you trouble and the patient much pain and distress!

NOTE:—Erysipelas will be dealt with in the next issue.—G. H. C.

Chicago, Illinois.

MODERN MANAGEMENT OF SUMMER DIARRHEAS OF CHILDHOOD.*

BY W. L. ELLIS, M. D.

TO the general practitioner during the hot weather, the management of diarrheas of children presents many points of interest; we seldom see our cases at the start and quite often it is after all the home remedies and drugstore prescribing have failed; the patient is exhausted, and the mother is anxious to get the "running off" stopped.

We may first consider the anatomical peculiarities of the infantile digestive tract; in comparison with the adult the intestines are longer, of smaller caliber, are smoother, and peristaltic action is slight owing to undeveloped muscles. The abdominal cavity

contains more intestinal loops, due to undeveloped pelvis and the abdominal walls are thin and yielding, hence the necessity of sometimes supporting them with the flannel bandage.

When we think of the many thousands of babies in the large cities and in the country carried off yearly by summer diarrhea, gastrointestinal catarrh or subacute milk infection, as it is called, and when we know that many of these little ones could be saved by preventive medicine alone, we feel that we should make every effort to instruct the parents as to the proper care of all food containers, bottles, nipples, etc., boiling them at least ten minutes and as often as necessary; the importance of regularity in

*Read at the Tri-State Medical Society, Galesburg, Ill., June 26-27, 1906.

Strychnine is primarily a heart stimulant and should be confined to stimulation of the muscular fibers of that organ.—Howes, *Med. Brief*.

Quinine will be the best remedy for the malarial headache. Will yield to quinine and iron treatment.—Marvin, *Med. Brief*.

feeding and the proper care and kind of food; the necessity of stopping all dummies and sugar tits; the importance of disinfecting the hands after changing the diaper, and also keeping the baby's hands clean; the proper amount of clothing, time for bathing, allowing plenty of fresh air and exercise, etc.—thus educating the parents and improving hygienic surroundings.

The best of all preventive measures is for the mother to nurse her baby; if this is impossible, then the best milk from a healthy cow, and where good milk is to be had I allow it modified only by the addition of a little salt, to prevent the formation of those heavy, cheesy curds; milk to be diluted as required by child. Citrate of sodium renders the curd more easily digested, is slightly constipating, is cheap, but salt is always handy and is a food.

I seldom use boiled milk; if the baby cannot stand the proteids in cows' milk (and some babies can't) I prefer to use condensed milk, egg albumen, or beef broths during its illness.

Withhold all food for twelve or twenty-four hours, and for two or three days if you can, allowing plenty of boiled water to be given, but usually you get such a howl from the parents you can't do this; if they understand what you are trying to do they nearly always aid you. Our object is to decrease the amount of toxins present.

Whatever the starting point of the trouble we soon have a fermentative decomposition due, of course, to bacterial multiplication; this soon produces a catarrhal inflammation of the intestines. If these active microorganisms could be held in check, the inflammation would soon subside; hence the importance of first cleaning out the intestinal canal.

When there is vomiting, intestinal decomposition, considerable fever from absorp-

tion, calomel is the best remedy, given in 1-10-grain doses every hour for several hours. If the stools are bloody and contain much mucus, castor oil (rendered tasteless by the addition of a few grains of saccharin to the pint of heated oil) is selected, as it thoroughly cleans, and at the same time soothes the inflamed mucous membrane; if farther cleaning is needed magnesium sulphate, sodium sulphate, or effervescing saline laxative can be used to advantage. I prefer the sodium sulphate, as it is very mild, especially useful in acid diarrheas, and retards fermentation. Zinc sulphocarbolate is perhaps our best agent in overcoming fermentation and at the same time it is astringent.

If fever is excessive aconitine and atropine are useful, especially the latter if much pain is present. I have often been asked after giving atropine if I hadn't given the baby some morphine, as the little one was resting so nicely. I very seldom use opiates. A tonic of strychnine or brucine and emetine has given me better results than anything I have ever used, I keep the patient on it for some time after the diarrhea is controlled.

Antiseptics are considered worthless in treating these cases, their action being spent on the stomach and upper intestines; antiseptic irrigating solutions are likewise condemned by the authorities; yet good results are obtained by the use of plain boiled water or saline solution.

It always seemed rational to me to use some mild non-irritating antiseptic, so I hit upon hydrogen peroxide and have gotten most excellent results; have also used it in typhoid fever, ileocolitis and septicemia with good results.

The strength of the solution is varied to suit the case; 5 per cent to 15 per cent is the usual strength, yet I have used it as high

Typhoid fever: Cardiac asthenia demands alcohol, strychnine, etc., in full physiological doses.
—Prof. Boggess, *Med. Brief*.

The whole is greater than any part. Did you marry the girl you wanted or annex her whole family indiscriminately?

as 40 per cent without any bad results. With hydrogen peroxide we check bacterial multiplication and decomposition, at the same time stimulate our patient and increase cell resistance by the oxygen taken up by the blood. The irrigation can be used every two or three hours at first, then two or three times a day; it seems to act better if an occasional saline irrigation is used.

The serum treatment I have never used, but from reports made in the journals it promises good results.

The after-management of feeding is very important and is our hardest problem; our patients are often considered out of danger when reinfection occurs, due most frequently

to some error in diet, and the intense prostration, high fever, etc., are again present. Babies cry oftener from thirst and heat than from hunger; every article of diet should be carefully watched and its effect upon the stool noted, until something is found which the child under treatment will take and which will agree with him.

Now as to the modern part of this paper, it is as follows: If any of you can tell me a satisfactory method of managing and at the same time thoroughly satisfying old Granny Meddler and some of the rest of the neighbors, I'll deem it the greatest therapeutic discovery of the age.

Grayville, Illinois.

INTESTINAL ANTISEPTICS IN THE TREATMENT OF TYPHOID FEVER, WITH REPORT OF FOURTEEN CONSECUTIVE CASES.

BY C. F. MAHOOD, M. D.

THE object of this paper is not to enter into a general discussion of the subject, but to outline the general management, and give a definite treatment of typhoid. This fever is defined as an acute infectious disease, caused by the bacillus of Eberth. The temperature is characterized by rising steadily during the first few days, with the afternoon temperature a degree or two higher than in the forenoon. In the beginning there may be diarrhea or constipation, with more or less tympanites, some gurgling and tenderness, localized in the right iliac fossa, easily elicited on slight pressure. In some of our cases we find rose spots on the body (a late and not constant symptom). The tongue is usually heavily coated, red at the edges, and at times is raw like beef-steak. The pulse is described as dicrotic, and is usually moderately slow,

100 to 110. These general symptoms are by no means constant.

The prodromal symptoms are indefinite, with a general feeling of malaise, chills, headache, and often nosebleed. In the beginning we should always make our diagnosis guardedly. The Widal and diazo reactions are of considerable value in doubtful cases, and can be easily made use of. Typhoid fever is due chiefly to contaminated water and defective drainage. Filthy surroundings and bad ventilation lower the individual's resistance. Milk and fresh vegetables may be the source of infection. Typhoid prevails mostly during the autumn months, though we meet with cases at all seasons of the year. Age has some bearing on the disease, it mostly affecting young adults; but it is met with at all ages. One attack usually gives im-

It depends on what you want to do with it whether the whole or a part is the greater; that is, the fitter for our purpose.

Does Stephens pillow his head on a live goose or on a regulation sack of its feathers? The part is greater than the whole, you know.

munity from future attacks, though two and even three attacks have been recorded in the same person.

We consider typhoid a constitutional disease with local manifestations, particularly in the intestinal tract; there is a catarrhal condition throughout the large and small bowel, associated with epithelial desquamation and ulceration of Peyer's patches, in the middle and lower portion of the small intestines. This condition is described as (1) hyperplasia; (2) necrosis; (3) ulceration; (4) the healing process.

But the object of this paper, as stated, has more to do with the treatment than a general resume of the entire subject. Many eminent practitioners decry the value of intestinal antiseptics in the course of this disease, claiming that typhoid is no more a primarily intestinal disease than is small-pox a primarily cutaneous disease. Nevertheless, there is a goodly number of us who will continue to find use for intestinal antiseptics in typhoid fever. I am not an advocate of any of the many vaunted specifics that have been put before us, such as acetozone, Woodbridge's treatment, Yeo's chlorine, etc. I have had a limited experience with all the aforementioned treatments and have yet to be convinced of their superiority over the sulphocarbolates, along with modifications of the Brand baths, with strychnia, alcohol, turpentine and castor oil as indicated—trying not to do too much, nor yet too little.

As a prominent physician recently said, there should be a sign over every typhoid bed, reading, "Let this patient get well," that is, that we should not be overzealous in our treatment.

Below I give briefly the histories of fourteen consecutive cases in my practice during the fall of 1905, part of them in village cottages, others in country cabins, where

the hygienic surroundings and nursing were by no means the best.

The average age of these patients was 25 years. Average days treatment, 22; one day over two weeks. Oldest, woman of 57, youngest, child 2½ years. Most protracted case, 37 days, in a man of 36, who was accustomed to the use of alcohol. Shortest case, 14 days, in a young girl of twelve years.

In the beginning of treatment, I generally start by cleaning out the intestinal canal with small repeated doses of calomel and soda, following this with castor oil, or an enema. For the fever cold or tepid sponging is carried out, being governed by the temperature, keeping it in the neighborhood of 102° F. Ice cold cloths are applied to the head, and if the headache is severe, an occasional dose of phenacetin or codeine is administered; this is seldom required except in the beginning. Strychnine is given early in the course, starting with 1-60 grain, increased to 1-30 grain, given at intervals of from three to five hours. The sulphocarbolates are given in the following formulæ: Zinc sulphocarbolate, drs. 2; acid hydrochloric dilute, drs. 3; elix. lact. pepsin, ozs. 2; aquae, q. s. ad ozs. 6. M. Fiat solution. Sig. Teaspoonful in water every three or four hours.

There is no objection to making use of the compound intestinal antiseptic tablet (the combined sulphocarbolates), but the above formula slightly modified has proved quite satisfactory to me.

Absolute rest in bed in a quiet, well ventilated room, with the enforced use of the bed-pan, are very necessary precautions to take. Secure a trained nurse if possible; anyway, have some one in charge that you can depend on.

A nutritious diet, liberal in quantity, and of liquid consistency is allowed, and in some cases where there is no inclination for

Argument is impossible between men who have been thinking and working in totally different planes. No contact points.

"Waiter, is this butter or butterine?" "If you can't tell the difference, sir, what is the difference?"

food, insist on its being given at regular intervals in small quantities. Whether milk is permissible in typhoid is a mooted question; where it seems to agree with the patient I see no bad effects from its use and often allow it. Buttermilk is allowed and is very agreeable with some people. I also give light animal broths, beef-tea, egg-albumen, rice gruel, orange juice, lemonade and plenty of pure fresh water at all times. Liquid peptinoids I have never found of any special benefit, and have entirely eliminated from the diet of typhoid patients. Vary the monotony of your diet as much as you can with safety. Below I briefly give the following cases:

CASE No. 1.—Miss E. C., age 32. At time of the first visit I found the temperature in the afternoon 104° F., pulse 120, tongue coated and tremulous. Headache had been severe for several days; bowels constipated and tympanitic. I began treatment with small doses of calomel and soda, following with oil. I started the treatment as outlined. The temperature ran a typical typhoid course, varying between 102° and 103° F. The pulse was guarded by strychnine and alcohol. Temperature was normal on the twenty-first day.

My nurse in this case was a young girl, of 12, who afterward contracted the fever whose history will be given as case No. 2. She had a typical and uncomplicated case of typhoid. Temperature varied between 101° and 103° F., which gradually declined to normal on the fourteenth day. Pulse was moderately slow, and was guarded by 1-80 grain of strychnine every five hours. The diet in these two cases was mostly sweet milk and broths. The hygienic surroundings were bad.

CASE No. 3.—A boy, F. T., age seven, who had been sick with slight bilious spells and diarrhea for some time. I found him

with an evening temperature of 105° F., pulse 130; tongue coated, bowels loose and tympanitic. Expression dull and at intervals mildly delirious. After the first few days the temperature was never above 103° F., and pulse 100 to 102. Strychnine, grain 1-80 with a small quantity of whisky was given every five hours. Cold sponging was kept up with iced cloths to the head to control the fever. No complications arose, and child's temperature was normal by the twenty-sixth day.

CASE No. 4.—K. C., girl, age two and one-half years. Sister to boy, case No. 3. This child had persisted in staying in the room, and around the bed of her brother, but was not taken sick until some time after her brother had recovered. The case presented most of the typical typhoid symptoms, with rose spots, tympanites, diarrhea and a temperature running from 101° to 103° F. Temperature normal by the fourteenth day, and recovery was rapid under the same treatment.

CASE No. 5.—D. V. A., male, age 32, occupation, teacher. Maximum temperature was 104° F., pulse 110 to 120. Fever lasted for a period of thirty days. This patient was constipated throughout the entire attack, which was relieved by an occasional dose of oil. During the first few days of illness the patient suffered from a very severe pain in the front part of the head, which was relieved by a few doses of phenacetin. The appetite of this patient was ravenous during his entire illness. Whisky and strychnine were given after the first week. Recovery was uninterrupted.

CASE No. 6.—W. C., girl of twelve. Temperature was 105° F. at first, and stayed at 104° F. for several days. Tongue was heavily coated, and bowels constipated. At times she was mildly delirious. Temperature was normal on the twenty-first

I have little use for the house itself. It is only an overcoat to be put on in stress of bad weather.—*Journal Outdoor Life*.

It were an injury and sullenness against nature not to go out and see her riches and partake of her rejoicing.—Milton.

day, and convalescence rapid. And at the end of the fifth week I allowed the patient to ride to the home of her parents in an open buggy, a distance of fifteen miles.

CASE No. 7.—Mrs. D. V. A., nurse and wife of patient No. 5. She contracted the fever six weeks after her husband's recovery and was sick one week previous to my first visit. Evening temperature, 105° F., pulse, 120. Bowels loose, some tympany, tongue coated, headache and chilliness. For several days the temperature varied from 102° to 103° F; pulse 110. Case continued satisfactory until ten days after beginning of treatment, when the temperature suddenly dropped to 97° F., pulse to 100. Skin cold and clammy; expression anxious. Bowels were flat and had moved the previous day. Condition was suspicious of perforation, while there was no localized tenderness. I increased the strychnine to 1-30 grain every three hours, gave whisky, one-fourth ounce, every two hours, and put hot water bottles to the extremities, and had the bowels moved with a warm enema. The following day temperature was 101° F., pulse 96, and her condition good. Recovery continued uninterrupted; temperature normal on the twenty-fourth day, and she was allowed to sit up at the end of the fourth week.

CASE No. 8.—F. W. H., male, age 36. Occupation, mining, and was accustomed to the free use of alcohol. Temperature in beginning 104° F., pulse 130, and weak. Tongue red, and raw like beefsteak; tremulous when protruded; later it was deeply fissured, and at times bled. Bowels were constipated and tympanitic, later became perfectly flat and exceedingly tender. For over five weeks this patient was with a temperature above 103° F. and for a period of over two weeks was in a semi-conscious condition, partially deaf, and unable to articulate. Strychnine was given from the be-

ginning in commanding doses; and likewise whisky. An emulsion of turpentine was given twice daily to combat the tenderness and tympany during part of this period. At one time the patient's condition was complicated with an annoying bronchitis, which responded promptly to treatment. It was fully two months from the beginning of illness before this patient was able to be up. Presumably the patient's former habits had some bearing on the protractedness of the case.

CASE No. 9.—Mrs. B. M., age 39; at the beginning of the menopause, and of a very nervous temperament. Maximum temperature 103° F., pulse 120. Tongue was moderately coated, bowels loose and putty-like passages. In the beginning the sight of food and medicine induced nausea, probably hysterical. This was a case that taxed my patience. The treatment was carried out with but slight variations. Temperature was normal by the nineteenth day, and she was doing light housework by the end of the fourth week.

CASE No. 10.—J. G. R., male, age 23. Temperature at highest, 103° F. Pulse was at no time above 110; and later became very slow, from 56 to 60. No complications arose and temperature was normal on the eighteenth day. He was back at his work at the end of the fourth week.

CASE No. 11.—Mrs. B. F. B., age 36. Fever ran a typical course. Highest temperature reached was 104° F. No complications arose and her temperature reached normal on the twenty-first day. Recovery was rapid.

CASE No. 12.—D. B., girl of 14. Maximum evening temperature 104° F., pulse 120, which was of sufficient strength and volume to require no special treatment. The usual treatment was carried out with cold sponging to control the fever. Temperature

The man who carries a lantern on a dark night can have friends all around him and he be not defrauded.—Beecher

Don't ever be deluded into thinking that economy and stinginess are synonymous terms. Light loads fail to kill game.

was normal on the seventeenth day and convalescence uninterrupted.

CASE No. 13.—T. H., male, age 22. Had been complaining for over two weeks previous to my first call. Temperature 103° F., pulse 116 and very weak. Sixteen days after beginning treatment temperature was normal, and recovery satisfactory.

CASE No. 14.—Mrs. A. J. H., age 57, mother of a large family. Very weakly in appearance and anemic. Temperature varied from 102° to 103° F. Tongue was deeply furred and raw at edges. Bowels slightly constipated, kidneys inactive. Fever ran a protracted course of twenty-eight days. Strychnine, digitalis and whisky were made use of in this case. Convalescence was slow, but satisfactory.

These cases are not selected at random but represent a series of cases that occurred consecutively in my practice, in which one general outline of treatment was carried out. All recovered. In these cases as well as in others, my experience has been that intestinal antiseptics are of decided value. While it is presumably impossible to render the entire intestinal canal antiseptic, yet we can make it as much so as possible. While there may be some objections to the use of the sulphocarbolates, because of their tendency to constipate and the possibility that they may cause anuria or retention, yet in my experience these conditions are very rare. Beginning the use of strychnine early for its tonic effect, has always been satisfactory in my practice, starting with a small dose, later increasing it to get the stimulating effect.

The prophylaxis of typhoid is of great importance, and it is the duty of every physician to give proper instructions as to the disposal of the excreta and to see that his orders are carried out. The proper facilities for nursing, and the particular care these pa-

tients should have are often wanting in the country; which often works to a disadvantage to the physician, and a still greater to the patient. Any routine treatment is, of course, not applicable to all cases, and should never be attempted. While we consider typhoid a self-limited disease we should not become misled by that fact, and think we can do nothing to modify its course. Proper medication, feeding and careful nursing, along with a proper understanding of the condition with which we are dealing, will enable us to bring most of our cases to a favorable termination.

Oak Hill, West Virginia.

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Dr. Mahood's report is an interesting one, and is a further testimony to the efficiency of alkaloidal methods. We want to emphasize a little more strongly than he has done the importance of thorough emptying of the bowel. When there is a high temperature which fails to yield to the antiseptic treatment, we almost invariably find that the bowels have not been properly cleaned out. The physician is too prone to take it for granted that his "opening dose" of calomel has done everything that was expected of it. In very many cases enemata or high colonic irrigations may be necessary—and sometimes they need to be repeated a number of times before we can be sure that the work is done. Now keep the bowel empty with the saline and push the sulphocarbolates.

The "constipating effect" of the sulphocarbolates, to which Dr. Mahood refers, may be avoided by a proper selection of the salt. The zinc salt is constipating, and while most appropriate in diarrheal cases is to be avoided in cases in which there is constipation. For the average case the "compound sulphocarbolates" is the best balanced preparation and the physician can be assured of its purity. This is a point

Testimonial: Before taking your medicine I was too weak to spank my baby; now I can lick my husband.

Lake obtained benefit from ergot in tinnitus and deafness with feeble circulation and threatened syncope.—*Med. Era.*

of the utmost importance when it is understood that a large share of the sulphocarbolates on the market are *not* pure. If there is constipation the sodium salt is the one of choice. While the formula recommended by Dr. Mahood may be excellent in some cases

we would not approve of its routine use. That, however, may be a matter of choice.

The fact remains that the sulphocarbolates cure typhoid fever. Doctors who use these salts have faith in them—because they cure.
—ED.

STRYCHNINE.

BY ROBERT GRAY, M. D.

MYSTIC substance of incomprehensible possibilities! The suicide's and the clandestine murderer's favorite balm for insupportable despair and ruthless revenge—the almost universal panacea of the scientific physician. Strychnine the subtle venom and the classic medicine, that kills or cures according to the malice, ignorance, or skill, that manipulates its employment! I have a faith in the potent antiseptic that endows it with almost magical attributes, well attested by the sterling service it has lent me so many thousand times.

I have the alkaloidal granules of strychnine arsenate, gr. 1-134, 1-67, and 1-30, the form I almost universally use. I once used the sulphate extensively, combined with liquor potassi arsenitis, Fowler's solution, as a topic remedy in anemia, but now I employ the strychnine arsenate instead, not that I regard it in any degree a better preparation but as a more convenient one, less repugnant, the composition reliable, of unquestionable purity and strength, and dosification infallibly correct, free from uncertainties of not seldom disastrous consequences with liquid medication, spoons being of many sizes and rarely ever filled with any uniformity, making reduced dosage when small and excessive when very large. I long ago discovered the grave imprudence of giving patients Fowler's solution or other

dangerous liquid to administer by drops as a singular carelessness prevails almost everywhere about such a really serious operation.

I employ strychnine, or its source, nuxvomica, in almost every case requiring internal medication; and the limit of its value, in my opinion, has never been discovered and can never be practically defined. I often administer it where diagnosis is doubtful, when I would be unable to affirm under oath just why. I do not offer any explanation beyond that I regard it as a universal antipathogenic agent, and nervous and cardiac stimulant, so positively reliable that it were difficult to use it erroneously. It is certainly a poison that dominates all complications of septic autotoxemia, in just the degree of measure that the system becomes and is maintained pregnant with its antidotal influence. We should and must obtain the limit of effect by progressive application and present dosage which works admirably and without accident till a daily quantity is reached that would be appalling as initial strychnine medication. One precious attribute is compatibility enabling one to combine strychnine with other indispensable substances in the treatment of some specific diseases, where its modifying functions are superlatively appreciative. As a prompt heart support my preference rests with glonoin and cactin, alternated with

Inflammations are more destructive of life now than in former years when medical knowledge was much more limited.—*Med. Era.*

Beta-eucaine is water soluble to 3½ per cent; beta-eucaine lactate is 22 per cent water soluble and has all properties of hydrochlorate.—*St. L. Med. Review.*

strychnine arsenate, once in a while, after influence is gained over cardiac action by the other substances.

It were irrationally idle to contend or even pretend that physical nourishment is imparted by strychnine, beyond the incomputable value of stimulation more excessive and lasting than that of alcohol or any other dependency of intoxicating derivatives. But strychnine exercises a propitious influence over the functions of appetite and digestion, thus indirectly promoting recuperation in a high degree, while modifying the pathogenic disorder of the patient. Nerve equilibrium and rest, that the magical action of strychnine lends to suffering nature, frequently serve to cure the disease, incomprehensible to our stupid understanding. In this age of anti fads we are much too prone to use some well boosted antiseptic, where simple old-fashioned strychnine would serve us a very much better turn.

The exacting exigency of stern necessity has admonished me more than all tuition, reading and study, that rational elimination, proper heart sustenance, something near equinimity of nerve tonicity, logical nourishment and surface cleanliness to insure normality of pore action, keep the undertaker out of the scene, which would require his part with slovenly slipshod medication or none at all.

The predestination that inculcates that one will live out the full measure of allotted days under any and every state of circumstances without scientific intervention is a monstrous fallacy of antiquated ignorance, worthy of its barbarous origin. Timely rescue from physical peril is equally apt and pertinent in snatching of one from the jaws of death, either from disease or in the act of drowning, when dissolution would be inevitable in either case without the interference of modifying or reclaiming influence,

beyond the physical possibility of the person in jeopardy to exercise.

In such desperate cases of disease-danger strychnine is often the potent agent that vouchsafes almost miraculous relief, or at least is a component of vitalizing forces that save the deplorable situation.

Another admirable property of strychnine manifests itself in the fact that long continued administration produces nothing uneventful of unquestionable character; nor does its use create vicious appetite, inseparable from the practical employment of many powerful substances, eminently valuable in their legitimate application.

One feature of strychnine medication in the United States seems to me erroneous: the administration of dosage too large at the inception, with intervals too long between them. I made the same mistake when a young man, with little more than class-room experience and boundless textbook faith. But later in life long hard knocks of tropical practice unschooled me in the usefulness of many classic theories. I found that often-repeated minimum dosage of strychnine was the rule of medication that harmonized with my requirements, and I now frequently administer the granules, grain 1-134, every fifteen minutes for four or five times, then every half hour, while I deem it necessary, and then hourly, or every two or three hours, sufficient to sustain the influence without danger of cumulative action, in grave rebellious fevers and alarming paralysis, with not seldom surprising results.

I have found that strychnine arsenate is more desirable than the sulphate or nitrate, the two violent poisonings seeming to combine in a neutralized way that attacks the autotoxicosis with powerfully modifying energy, the degree sometimes being so markedly appreciable as to inspire me with a strange confi-

Pruritus ani is often caused by irritating qualities of the feces, and local treatment is ridiculous in such cases.

See the *Va. Med. Semi-Monthly* for a curious article on the Therapeutic uses of the Clock, by Henry A. Robbins.

dence that the subtle medication is capable of eradicating asthma, bronchitis, consumption, even dropsy, if we truly understood just how to employ it to the measure of saturation necessary to impregnate the blood beyond the limit of bacterial tolerance. That such is possible we have ample demonstrations, logically rational, scientifically practical, yet obscurely occult, merely for want of legitimate tests of experimental treatment sufficiently protracted to realize the limit of possibility—a research I have been unable to prosecute to affirmative conclusions, for want of suitable patients to treat themselves, and the opportunity to give them the uninterrupted personal attention indispensable to the practical study of a proposition so delicately important to a determinate issue. Were I in a hospital permanently, or where I could secure the services of a reliable trained nurse for long periods I would make some tests sufficiently protracted to satisfy my problematical uncertainty.

I presume that the same more or less vague inkling permeates the pensive brain of many practitioners, which actuates me to dwell somewhat elaborately on the yet mootable subject, hoping thus to induce someone who may be suitably situated to take up the experimental study in practical formality and give any useful results to the profession, where new strange light is never superabundant.

Experience admonishes me to invite professional attention to the serious fact that experiments made in such low and delicate animals as rabbits, frogs, and pigs, or even healthy, adult persons, with wondrously perilous substances, afford little better than negatively uncertain and dubiously misleading guidance for application in scientific medication as agents of curative utility in practical therapeutics. Malignant sepsis in

an advanced state of development is often ample to modify the quantity and quality of dosage authorized by technical laws of materia medica to a degree that reduces the antipathogenic value to utter worthlessness.

To illustrate this sternly obstinate truth beyond all latitude of legitimate peradventure, take a patient whose life is in imminent peril from the bite of a venomous reptile, who bears without symptoms of intoxication alcoholic dosage ample to floor half a dozen persons in states of normality, or solution of spirit of ammonia sufficient to kill three in normal conditions. The venom of the snake neutralizes the pernicious danger of the medication to a degree that it becomes practically harmless to the physical anatomy of man, while it modifies the potent force of the else deadly poison of the reptile to the extent that the imperiled life is frequently saved—almost always in my experience, the lesion being well saturated with pure carbolic acid well liquified.

My desperate cases have been numerous. We have practically the same destructive phenomenon, whether vaguely recognized or ignorantly suspected in the complication of almost any grave case of septic poisoning, frequently assuming symptoms that abnormally rival the perilous prognosis developed by the venom of the reptile, whose consequences are equally deadly, when not timely subjected to appropriately modifying influences; and we are or should be powerfully admonished that such auto-toxemia requires heroic medication little less actually radical than in snake bite. Here is where we make the monumental mistake of all scientific blundering in taking for our guide the results demonstrated by experiments with little animals susceptible to the influence of any poisonous substance, even such as are not violently active, or in the normal systems of healthy persons, where

A Philadelphia Professor the other day told his class a baby should sleep in two rooms, with a nurse with a southern exposure!

The worst thing that could happen would be a divorce of Science and Common Sense. They should go hand in hand.—Laplace.

lethal dosage would be inadequately incompetent to cope with the fermenting septic poison, appallingly crescent in the thoracic cavities of mankind. Our duty indicates the abandonment of the beaten track of error, and the quest of truth in the light of experimental progress, where practical results demonstrate the legitimate measure of medication necessary to modify or control extraordinary complications of autotoxic poison, not definable as a general rule, but as applicable in each individual case, some conditions of the same disease requiring three or four times the dosage demanded in others, involving several patients, with rarely two of equal degrees of dangerous symptoms, a dilemma in which the practitioner must rely on the aptitude of his intuition and skilful intelligence alone for guiding light, or helplessly drift onto the breakers and remain stranded with half of his desperate cases.

Practically, there is no important degree of dangerous difference existent whether the poison enters the system through the medium

of reptile fangs, ingestion or autotoxemia. It impregnates the blood in either case, and must be expelled or radically neutralized before there can be exemption from peril to life; and the sepsis should not be regarded as less seriously dangerous than either of the others, as autotoxemia consigns a thousandfold more victims to premature graves than both the other instruments of destruction.

Podophyllin, glonoin, cactin, aconitine, veratrum viride, strychnine arsenate, and the sulphocarbolates, give me victory over tropical septicemia; and it is little probable that any of you ever meet a more malignant specimen than that which is rarely absent from my daily practice.

I administer such potent substances to abort or abruptly arrest the development of whatever autotoxemia may confront me, in dosification sufficient to realize my object promptly, when vitality is not undermined before the helpless patient is seen. And this method brings me success.

Pichucalco, Chiapas, Mexico.

A NOTE ON THE IMPROPER MANAGEMENT OF EPILEPTICS.

BY MARC RAY HUGHES, M. D.

Professor of Mental and Nervous Diseases, Barnes University (Med. Dept.); Professor of Criminal Anthropology, Benton College of Law, etc., St. Louis, Mo.

NOT many years have elapsed since epilepsy was listed in the category of incurable diseases, in fact, most people now believe it to be a disease never entirely eradicated by treatment. There are many reasons why it should be now classed as a curable malady. Like all diseases, the more we study the etiology and pathology, the better we become acquainted and are more capable of producing results from our treatments.

Heretofore, scarcely anything was known regarding the pathology of this disease. Now we know that there is a distention of the ventricles of the brain and a decided contraction of the arterioles of the cerebral cortex, though each stage of the disease has a separate and, in a manner, a distinct pathology of its own. In the grand mal type there is more fluid in the ventricles and more vasomotor disturbance, due to pressure. There is more of the alternating state of irritation and paraly-

Shoemaker says the country doctor knows a thing or two about therapeutics. There are no country doctors any longer.

The summer climate of Comfort, Texas, is described as being like that of the Northern Lake resorts. Praise can no further go.

sis of the vasomotor system of the brain and allied nervous system, especially at the beginning of the attack.

That is the first step in the pathology of grand mal. There are two other steps and stages in this variety of the disease that it is not necessary to mention here, but suffice it to say that each stage and each pathology of that stage can be produced artificially in animals and studied. A trauma, a blood toxin and autotoxin are producers of the disease; likewise the intravenous injection of absinthe, ammonium carbonate, alcohol, camphor, etc.; also irritation to the vasomotor brain blood supply and superinduction of ventricular fluid by galvanism and faradism.

This disease is one that should be handled in the carefullest manner. One reason why it is so widely classed as an incurable disease is the fact that the treatment has been overdone at the wrong time or not carried on far enough at the proper time. The use of electricity has been greatly abused; likewise the bromides. Electricity is capable of producing epilepsy according to the area of brain covered by the flow of the current and the way the poles or electrodes are

placed. The bromides are not drugs to be given together, and results are much better when they are given separately.

It is not possible to effect a cure by the use of bromides alone—not by any means, but many think so. The patient, in the first place, in many instances is not carefully examined, is placed upon bromide and electric treatment at once, as soon as the diagnosis is made, without respect or regard to the exact mental phenomena that are taking place within the structures of the brain at that particular time, or without knowing or understanding why that condition is present. Naturally enough, the results are negative, and that is the first reason why it is considered incurable. The second reason is because pains are not taken in the first and subsequent examinations to ascertain what mental phenomena are taking place within the cortex and giving rise to that particular stage of the disease at that time and what is likely to follow. The third reason is that most practitioners believe the treatment of all epileptics to be directed alike, therefore the examinations are shallow, and the patient does not recover.

St. Louis, Missouri.

MORE ABOUT ELECTROTHERAPY.

A. C. SHERWIN, M. D.

I HAVE read with much interest the article written by Dr. Henry W. Barnum in May's issue of *CLINICAL MEDICINE*. I have practised medicine thirty years; the first twenty years in a country town, the remaining years in this city. I have been a constant reader of this *JOURNAL* for a number of years and never have written a word for its columns. I trust you will give me a little space in your valuable

JOURNAL and I will give its readers some of my experience with static electricity in the treatment of abnormal conditions.

I have used a static machine something like nine years. I remember that during the second year a lady came to my office one day suffering with headache. She had been a constant sufferer for over two years. She was twenty-two years of age and very plethoric, but was the picture of good health.

The greatest summer resort in the United States is undoubtedly Chicago; and thousands of southerners realize this.

Comfort, Texas, seems a cheap and every way desirable resort for summer, 1500 feet elevation, good water, abundant vegetable supply.

Weight, about 150 pounds. There was no trouble with her menstruation, her digestion was good, bowels regular, but had the headache "all the time," as she expressed it. She had been treated by some of the best physicians in Boston, with little or no benefit. Someone mentioned to her that I was treating those cases with electricity, so she came in with the intention of trying it. I was then more inexperienced with its uses and its "modus operandi" than now, and I hesitated about applying it, by reason of the marked plethora, but finally I decided to try the negative current. I did so for about twenty minutes, when her pain was all gone. This encouraged me as well as my patient and she continued to come to my office three times weekly for one month. She was entirely cured. One year after treatment she called to tell me that there had been no return of headache.

As Dr. Barnum well says, perhaps one of the most signal triumphs achieved with the use of static electricity is in the treatment of sciatica and lumbago. While I heartily approve of his methods of application I desire to state that I am in the habit of using what is called the massage roller over the lumbar muscles and when the sciatic trouble is present I follow the course of the nerve. I place the balls near together at first until my patient becomes used to the action. Then I gradually separate them until they get the full force. Of course it will depend upon the strength of the machine as to the distance the balls can be placed.

The emphatic point I wish to make is that whatever electrode is applied the strength should be as much as can be well borne through the parts involved. After I go over the parts thoroughly with my roller, I then throw the sparks, usually from the same, and I am astonished sometimes to see the enormous size of the sparks that some

of my patients can endure. I then finish the treatment with the electric wave, or fan, as it is called. When I arrange my patient upon the platform, I usually connect him or her to the positive pole. I ground the negative when I wish to produce the best tonic results. I allow them a session of from ten to fifteen minutes, in the meantime telling them that they will feel the electrodes to quite an extent, and it is only to their advantage.

I obtain the best results in cases of rheumatism, neuralgia, etc., when I allow twenty to twenty-five minutes for the entire treatment. This should be repeated in most cases every day until improvement is well marked, then every other day. I have also treated and cured bad cases of chronic bronchitis with the electric wave. I have successfully treated tumors and cancers with electricity. I have many times aborted an acute coryza with the spray, and arrested a bad toothache in fifteen minutes with the same.

Some three years ago a lady came to me suffering from attacks of angina pectoris. I could not find hypertrophy to any extent, but that it was angina, there was no doubt. All the prominent symptoms were present. I need not mention them. She was sixty years of age. I treated her three months with static electricity, hardly any medicine being used, and at the expiration of the time she was apparently cured. A year ago I saw her and she had had no return of the angina pains. I have treated many cases of locomotor ataxia. I have also treated and cured many cases of varicocele with electricity. I firmly believe that not many years will pass before almost every practitioner will have some good electrical apparatus at his command. Study it carefully, my brother, wherever you are located.

Boston, Massachusetts.

Comfort is not a consumptive resort; has good fishing and bathing, fine for tent life from May to October; on railway.

H. C. Buck (*Med. Summary*) describes three cases where he used green apomorphine as an emetic with perfectly satisfactory results.

DEPARTMENT OF
SURGERY
GYNECOLOGY AND OBSTETRICS
 WITH A REVIEW OF CURRENT LITERATURE.
 In charge of Dr. EMORY LANPHEAR
 Address all communications designed exclusively for this department to
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THE IMPORTANCE OF PELVIC DISEASES IN WOMEN AS A CAUSATIVE FACTOR IN INSANITY.

BY W. O. HENRY, M. D.

Surgeon to Omaha General Hospital, Gynecologist to St. Joseph's Hospital.

I AM sure this question has not received the attention from the profession in general, and gynecologists in particular, that it deserves and it is only a question of a short time until every prominent text-book on Gynecology will treat of this subject more or less favorably. As it is now, most of them do not mention the subject at all. A few mention it to condemn and one or two others give it scant notice. My experience as a gynecologist (I not being connected with any Insane Hospital) has, of course, been somewhat limited, and yet after fifteen or twenty years of careful observation there are some conclusions which I have reached, that seem to me to justify the above opinion. I wish to cite one case as typical of a number of others which have been under my care, which may illustrate the point.

Mrs. S., aged 52 years, mother of several children, passed the change of life five years ago, had suffered for a number of years with a retroflexed uterus, was slightly torn during her child-bearing period, and now, although under the care of a prominent surgeon who fitted her with a pessary, she did not get much relief, but grew into a serious melancholic state. She was brought to this surgeon for treatment and after examination he pronounced it a case of insanity which should

be sent to the Asylum as nothing in his line could give her any relief.

Accordingly, she was sent to an Insane Hospital under the care of an alienist who treated her for some time without any relief, and another one of the most prominent alienists in the West was called for consultation and they agreed that there was nothing more which could be done but to keep her at the Asylum and temporize, but after a short trial in which there was no marked improvement she was referred to me for examination and opinion.

I found a retroflexed uterus and a very badly ulcerated cervix, with severe hemorrhoids, which were also badly ulcerated and advised the removal of the hemorrhoids and the removal of the uterus by the vaginal method as a probable means of restoring her to physical health. Accordingly, she was placed in the hospital and these operations were done. She made a steady but prompt improvement and fully recovered both her physical and mental health within a few weeks' time and has remained well since. The period during which this woman has remained well, being only about two years, is perhaps too short for us to say positively that there will be no return of the mental trouble and yet it seems quite likely that

unless some untoward circumstance occurs she will remain permanently relieved. There can be no question in this case but that the local irritation was so marked as to be the deciding factor to unbalance the mind and when this was relieved the mental equilibrium was again restored.

A number of other cases of even more severe types than this one have been operated upon successfully, and the mind restored and periods of from five to eleven years have elapsed without the recurrence. Therefore, I feel justified in concluding, that, as gynecologists, we have a right to say that by timely operation we may prevent the occurrence of many cases of mental aberration; or, after the mind has become unbalanced many cases may be restored by proper attention to the pelvic organs and the sooner this is done after the mental disturbance appears, the more certain it is that perfect results will follow.

And again, I think we may insist upon the importance of the general practitioner, into whose hands these cases generally first come, insisting upon having all pelvic disturbances

rectified at the earliest possible moment. It is generally recognized that these cases have suffered gradual mental deterioration for months before the family is willing to say that the person has become unbalanced, and yet the family physician is consulted several times as a rule before the case is one of pronounced mental disturbance. If, therefore, he were to insist in the very beginning upon the careful examination of these parts and a complete removal of all pelvic irritation, many times the mental disturbances would be promptly arrested, and both the physical and mental health secured.

It is a fact that oftentimes these women in whom there is very serious pelvic diseases do not complain at all of any disturbances there, so that we must not wait for these patients to direct our attention to the pelvic organs but since their connection with the brain is so intimate and reflex disturbances here so often affect the mind, these organs should be the first carefully investigated, where mental disturbances are present or pending.

Omaha, Nebraska.

THE TREATMENT OF ENDOMETRITIS.

BY CURRAN POPE, M. D.

Professor of Physiological Therapeutics in Kentucky School of Medicine; Medical Superintendent, Pope Sanatorium, Louisville, Ky.

HYDROTHERAPY.

THIS portion of the treatment may be divided into that of balneotherapy, the use of mineral waters and true hydrotherapy: the application of water to the external surface. Among those waters that have been especially recommended in the treatment of endometritis may be mentioned Waukesha, Crab Orchard (Ky.), and Rock Bridge Alum Springs. The Saratoga waters of the Vichy springs and

some salines are spoken of as valuable, but the author has never seen any good come from the use of these waters, save in anemic cases, the drinking of chalybeate waters and the employment of the Rock Bridge Alum Spring water as a douche. The baths of the thermal Hot Springs of Virginia and Arkansas, the Pagosa Springs of Colorado, and the Salt Lake Hot Springs of Utah, have local reputation. In like manner

Philippine dysentery: Banister found bismuth harmful, interfering with the essential quinine irrigations.

Filipinos harbor parasitic menageries in their intestines and yet appear little the worse for it.—Banister, *Jour. Mil. Surg.*

Kissengen⁷ and Nauheim in Europe are sought by these patients.

Hydrotherapy is one of the most valuable methods for general stimulation of patients suffering from this disease, and if this scientific measure which modern medical progress has placed in the hands of the physician is not always used in the treatment of this class of diseases it is not because they do not exist or are unknown; but in many cases because of the lack of facilities for their employment and in some instances a lack of appreciation of their true value. A failure to employ hydriatic procedures in gynecology is probably due to the fact that the family physician does not realize that two cotton sheets, two blankets, half a dozen towels, and several pieces of thick flannel cloth,⁸ a thermometer, hot and cold water in abundance, are the only necessities for applications which may relieve excruciating pain and build up good general health. In these cases cold water is a tonic measure superior in my opinion to every other known means for producing prompt, satisfactory and permanent results.

The local application of hydriatics to these cases embraces the use of the douche, which has already been considered, and in addition we may commence with the following course of treatment: When the patient is weak, anemic and very much run down we may begin with the cold sponge bath. Remove the clothing, wrap the patient in the blanket; sponge first one arm and then the other, then the legs, chest, abdomen, and back. The sponging should be repeated, each member dried and vigorously rubbed before proceeding to the next. Commence with a temperature of 85° F. and reduce this temperature 3° each day until 60° F. is reached. After each treatment the patient should receive a general rubbing with a crash towel, taking care to prevent

exposure to cold. This treatment may be given during the morning hours.

A very valuable adjunct to the cold sponge is the cold abdominal pack which may be applied in the afternoon or what is better at bed-time. It is given as follows: Fold a blanket lengthwise to such dimensions as will extend from the nipple to just above the knee. Fold a cotton sheet in the same manner six inches smaller than the blanket. Dip the sheet in water at a temperature of 60° F. and spread upon the blanket. All clothing, save the night dress, is removed and the patient lies upon the blanket and wet sheet which is rapidly folded over her, care being taken to tuck the wet sheet between the inner surfaces of the thigh. The blanket on one side is now pulled across the body and tucked under the side of the patient's body and limbs. Care and skill should be exercised to shut out every particle of air possible, as a failure to do this will decrease the beneficial results. Its proper application requires a well-trained nurse, although the physician, if he understands its application, can instruct a member of the household how to apply this simple procedure. The pack should remain for one hour upon the patient, at the end of which time it is removed, the patient gently dried and tucked in bed.

In the sanatorial treatment of these cases I generally commence with graduated tonic measures, and to this end nothing is better than the use of the dripping sheet applied for three minutes with vigorous friction, while the patient stands in a tub of very hot water. We commence at a temperature of 90° F. and daily reduce the temperature 3° until 60° F. is attained. Usually by this time the patient has been prepared to undertake fuller treatment.

In other cases where the individual strength and reaction is pretty fair, the

⁸Suspended matter in Chicago city water consists chiefly of diatoms, as harmless as celery or lettuce. —Whalen.

No formalin has been found in Chicago city milk since last October; out of nearly 12,000 samples examined.

treatment may commence with the following: The electric-light bath, hot air or vapor bath is given until the patient is thoroughly warm, or until *very mild* perspiration takes place. She is then removed to the circular or horizontal rain bath at a temperature of 100° F. for one and one-half minutes, reduced to 80° for one-fourth minutes, pressure twenty pounds. This treatment is given daily and the temperature dropped 2° and the pressure increased one pound daily until 60° F. and thirty pounds pressure is registered. As soon as this has been attained we give the foregoing and in addition as a *finishing* treatment, decrease the cold water to ten seconds and apply the jet douche at 60° F. to the spine, paying particular attention to the lumbar and sacral regions and carrying the jet down the posterior aspect of the thighs. The entire duration of the jet should not be longer than five to ten seconds and its pressure thirty pounds.

For those cases that suffer considerable pain and in which the discharge is very free we may employ the very hot Sitz bath at 110° to 120° F. for five to ten minutes followed by a cold douche over the lower spine and hips. This we call the hip douche, the temperature of which is usually 60° F.

For old chronic cases in which there is a considerable hyperplasia we employ the cold Sitz at 60° to 70° F. for two to three minutes, followed by a very brisk and vigorous friction with a crash towel.

ELECTRICITY.

Electricity is the chief local remedy and by its means we are enabled to relieve the pain, subdue inflammation, check secretion, improve absorption, and promote resolution. Electricity in some form is absolutely essential to the treatment of endometritis. Caution must here be given as to the steriliza-

tion of all instruments, electrodes, applicators, etc., that are used in the treatment. The cotton should be antiseptic with which we wipe off the mucus from the cervix. While electricity of itself sterilizes the electrode and discharges, still no physician should be in any sense guilty of that abomination, surgical uncleanness. In my practice the instruments, cotton, etc., are prepared and the patient put in position and covered with a sheet by a nurse, and it is my opinion that where electro-gynecology is used that a nurse should be present, as it is exceedingly embarrassing to most women to have a physician arrange the different pads on abdomen or back and make the other preparations. This comes eminently within the sphere of the nurse, and I believe better results are obtained when the nurse is present, as it gives confidence and inspiration to those who take the treatment.

I always commence the treatment of chronic endometritis with bipolar vaginal faradization because of its well-known sedative pain-relieving and decongesting effects. The patient having been placed in the dorsal position and the clothing arranged by the nurse we may commence the treatment. Throw in two, three or four of the large cells that energize the primary of the faradic coil. Place on the slide a coil of 36 wire, two thousand yards in length and then gradually throw on the current by means of the Archimedes screw, testing the current with the hand *before* the electrode is introduced. Having found that the vibrator "sings" evenly and that the current is flowing without jerking, the current is then turned off and the electrode introduced deep into the vaginal canal so that the anterior tip rests behind the uterus. I prefer the small bipolar electrode in preference to the large one. The current is now gradually turned on to the point of toleration

Nux vomica has a place in practice of medicine infinitely larger than the legitimate place of strychnine.—Howes, *Med. Brief*.

The action of nux vomica and of its alkaloids is practically the same, so that either may be prescribed.—C. D. F. Phillips, *Med. Brief*.

and continued for five minutes, increasing three minutes each sitting until fifteen minutes is consumed.

At this point we may then commence the use of the galvanic current. My plan of procedure is as follows: The patient being in the dorsal position upon the table, the nurse places on the abdomen or lumbar region a large felt-covered electrode thoroughly wet in hot bicarbonate of soda solution and attached to a five-foot cord. My special speculum is then introduced, the mucus sponged away by means of cotton and a suitable electrode introduced into the external os and attached to the other cord of the battery. The pole-selector is now thrown into position so as to connect the positive pole upon the abdomen or back and the negative to the uterine electrode. Sufficient cells are thrown into the circuit by means of the cell-selector (usually ten to twenty) and the current gradually thrown on until it registers about 10 ma. After about half a minute a slight froth will be discovered and the electrode will move forward under gentle pressure until the entire cervical canal is opened. By this method, drainage of the uterus is secured and the thick and tenacious secretions of the cervix softened and liquified. After the electrode has been passed into the uterus, resistance in the rheostat is lessened and fifteen to twenty ma. given for five minutes.

The total result of this treatment will be dilation of the cervical canal, its remaining patulous, cleansing the tissues, stimulating the glands, an increase of tissue reconstruction and repair.

At this point the therapeutician must adapt his treatment to the particular condition in hand. If the uterus is hyperplastic, the use of the negative pole should be continued as the action of this pole will be that of a softening and relaxing influence,

thus changing the hardened and increased tissue into more normal ones. Even in this condition the occasional use of metallic electrolysis will be found of advantage.

When no hyperplasia or hardening exists we may use one of three forms of treatment. If the uterus is boggy, soft, and flaccid; use the copper electrode; if sclerotic use the zinc, and if the discharge is purulent, zinc-mercuric cataphoresis.

The character of the electrode to be used must be governed by the size, condition, and tortuosity of the canal and for that reason the operator should have a number at his disposal, varying in caliber and length. For a very tortuous and small canal the author has found Massey's flexible electrode to fill a unique niche. As soon as the canal is opened it becomes important that the size and length of the electrode should be such as to bring it in contact with the entire cervical canal. It has been stated before that if sclerotic the zinc electrode should be employed. It is a good plan, however, to first treat indurated and sclerotic uteri and cervixes with negative electrolysis, following it later with the zinc and still later with the zinc-mercuric treatment.

Apostoli prefers the method of simple galvanization, employing a non-oxidizable electrode of tin or platinum, giving a current ranging from thirty to fifty ma. for five minutes, or 75 to 100 ma. for three minutes, the best electrode being intrauterine and the negative the indifferent. The action of this current is caustic on the superficial and electrolytic on the deep tissues.

Metallic electrolysis as first suggested by Massey is undoubtedly the local treatment *par excellence* for all forms of chronic endometritis. In this treatment oxidizable electrodes of copper, zinc, and zinc coated with mercury are employed, the dosage of the current ranging from fifteen to forty

Cramps and bowel pain may be caused by ordinary doses of the tincture of nuxvomica in some patients.—Phillips, *Med. Brief*.

Strychnine is at once a gastric, vascular and nervous tonic (Brunton) aiding appetite and digestion, preventing putrefaction, etc.—Phillips, *Med. Brief*.

ma. and the duration from three to five minutes. Its action is both antiseptic and germicidal. The value of the treatment consists in the chemical decomposition that takes place while the electrode is in contact with the tissues. Whether this be mercury, zinc, or copper they are acted upon by the electric current which carries the salts of the respective metals well into the tissues, the action being perfectly and absolutely under the control of the operator. This is especially valuable in gonorrheal endometritis. The metal that composes the electrode must be absolutely pure. The positive pole collecting acids from the tissues decomposes the metal and forms an oxychloride of the particular metal used in a soluble and diffusible state. By the cataphoretic and osmotic action of the current these salts are carried *to* and *through* the mucous membrane, glandular structures and *into* the muscular tissues themselves, and in this way they are most thoroughly and

effectively applied. This is not alone true of the salts, but the valuable action of the positive pole is superadded; the value of one enhances the other. There is no destructive cauterization, no caustic action on tissue and no deleterious effects from the absorption of the metal as might occur from solution used intrauterine.

The value of this treatment is not limited to the endometrium but applies to any mucous membrane in the catarrhal state. Its action therefore may be described as antiseptic, astringent, sedative, stimulating and anti-bacterial. Note will here be taken of the fact that drugs and applications act as a rule, solely upon the surface and sink but a short distance into the membrane, while in this instance the soluble salts are deeply driven into the tissue. Again absolute control is had of the current to such a degree that we can mildly stimulate or actually cauterize.

(To be continued.)

TECHNIC OF DRESSING THE CORD.

BY EDWARD K. LAWRENCE, M. D.

ON page 645 of the May number of CLINICAL MEDICINE I was pleased to read an interesting article by Dr. John C. Murphy on "Aseptic Dressing of the Umbilical Cord." The line of thought opened by this article is one seldom touched upon, either in our lectures, text-books or journals, and yet the proper attention to this part of a confinement is one of the "little big things" which frequently go a long way toward building up the reputation of the physician in a community.

In a country practice the term "asepsis" must be only relative in many cases, and as frequently we do not have time to much more than get to the scene of action before

the arrival of the little one—hence we do well to "do the next best thing." My method in these cases differs to some extent from the accepted plan, and I give it, as it may appeal to some as an improvement.

In my buggy case I always carry a canvas roll which contains my forceps, needle holder, dressing forceps, irrigating curet, scales, umbilical scissors, and a pair of large hemostats. One of the bottles on the card contains common cotton string which has previously been boiled and soaked with alcohol. A rubber sack incloses a roll of cotton, and a spool of half-inch oxide of zinc adhesive plaster finds a place in an odd corner.

In intestinal atony strychnine is of service especially in that apparently hopeless form where the large bowel does not contract.—Phillips.

In subinvolution of the uterus in weakly subjects, strychnine is of service. In dysentery with depression it may be useful.—Phillips, *Med. Brief*.

When the pulsations in the cord indicate the proper time to tie it, I roll the cord from about one inch from the body outward for two or three inches, to lessen the amount of Wharton's jelly, then clamp on one of the hemostats, say one inch from belly wall, and the second an inch or so beyond it, and cut between them. If the mother does not require my immediate attention, I usually proceed at once to tie the cord, after having the child taken to a suitable warm and light place. I pull out the amount of aseptized string required, with the dressing forceps, double two or three times, and tie in the groove formed by the pressure of the forceps. This way offers the advantage of quickness and ease of first application, in a place where the light and other conditions do not favor careful tying, and the depression in which the string is placed precludes its slipping off and allowing a possible hemorrhage.

While the baby is being washed, usually with a slightly antiseptic soap which I carry with me, I am looking after the mother and afterbirth, from which latter I remove the second forceps as soon as delivered.

The baby being properly washed and dried by the nurse I am ready for the cord. I take a piece of sterile cotton, one-half the ordinary thickness, and about three inches square, make a hole near the center by sticking my finger through it, draw the cord through this hole, fold cotton neatly over it, leaving

a layer between cord and abdomen, then while the nurse holds the loose ends from springing up I warm a strip of one-half inch adhesive six or eight inches long and stick it over the dressing at the lower part and attach the ends to the skin; a second piece is placed across the upper half of the cotton in the same manner.

This method offers the advantages of an aseptic first dressing, the band can be changed easily whenever soiled without disturbing the cord, hence less danger of starting a hemorrhage. The slight pressure of a band over this soft body acts as a support to the umbilicus, preventing a possible umbilical hernia, and the absorbent nature of the cotton favors an earlier separation of the cord with less tendency to odors.

The progress of separation may be watched by raising the lower border of the cotton daily. When it comes off the adhesive strips are removed by a slight jerk.

I have noticed quite a difference in the time required for the cord to come off. In two cases separation occurred during the third day, and in one it was delayed until the end of the thirteenth day; usually normal separation takes place about the fourth or fifth day.

My instruments are always cleaned, boiled, before I leave the house, carried in a clean roll and, when possible, allowed to lay in a carbolic solution at the next case.

Pawnee Rock, Kansas.

CARCINOMA OF THE STOMACH; ITS EARLY DIAGNOSIS.

BY G. PAUL LAROQUE, M. D.

Lecturer and Bedside Instructor in Surgery, University College of Medicine; Clinical Assistant Surgeon St. Luke's and Virginia Hospitals, etc.

NEXT to the uterus the stomach is the most common primary seat of cancer; and in more than two-thirds of the cases of gastric carcinoma the pylorus and lesser curvature are involved.

Strychnine: Its chief value in cord diseases seems to be in chronic affections of the anterior horns.—Phillips, *Med. Brief*.

The positive demonstration that carcinoma of the stomach in an early stage can be completely and permanently eradicated by surgical operation, greatly increases the responsibilities of every doctor in the manage-

In functional paralysis, lead, alcoholic and diphtheric neuritis, strychnine decidedly promotes recovery of power.—Phillips, *Med. Brief*.

ment of his cases of so-called "dyspepsia." Careful study of a great many cases of this affection during the past five years at the bedside, the operating table and autopsy, has convinced the writer that the physician who depends for his knowledge of gastric cancer upon the average text-book description of the affection, will rarely recognize the condition till the disease has become widely disseminated and obvious "across a public square."

In forthcoming editions of text-books, the diagnosis of carcinoma of the stomach will doubtless be rewritten and greatly abridged. Elaborate and detailed descriptions of advanced cases are of little use to the practical physician. Cases conforming to the type of these are of more interest to the student of dead-house pathology than to the conscientious clinician who attempts to cure his patients. The cardinal symptoms of the affection may be summarized as follows:

1. *Chronic gastric catarrh.* The signs of this affection (see article by writer in *Charlotte Medical Journal*, March 1906) developing in an individual past 30 years old, or representing an aggravation of previous digestive disturbances, is strongly suspicious of malignant disease. Generally the signs of carcinomatous gastric catarrh are of rather sudden development and always progressive, though remissions of intensity may be noted.

2. *Anemia.* Loss of flesh and anemia are, in the early stages, due to indigestion and are progressive in spite of treatment. Trivial degrees of these are significant. Rapid emaciation and cachexia are late signs and the diagnosis should be made before these appear.

3. *Hematemesis.* Gastric bleeding is present when the mucous membrane becomes ulcerated and this is generally early. The blood oozes from the ulcerated mucous

membrane continuously though not as a rule in copious quantities. The vomited material shows blood. This may be in such small quantity as to demand chemic or microscopic examination for its demonstration. In larger amounts coffee-ground-looking material may result after the blood has undergone partial digestion. Fresh blood will be red in color but is not generally profuse. Melena is common though often occult.

4. *Pain.* Aside from the pain of chronic gastritis there is often noted a darting pain vaguely located in the epigastric region, not dependent upon food and not relieved by vomiting. Frequently the affection is entirely painless.

5. *Changes in Gastric Contents.* This material generally shows diminution of HCl beyond what would be expected from simple chronic gastritis. Lactic acid is present early, in greater quantity and more persistently than is the case with ordinary gastritis. Too much reliance should not be placed on the presence or absence of this material. Pus is often noted but is without diagnostic value. Cancer cells are exceptionally found. Oppler-Boas bacilli are without diagnostic significance.

6. *Enlargement of Stomach.* Gastric dilatation with impaired motility, retarded absorption and (when located about the pylorus) pyloric obstruction are noted and trivial degrees of these should be recognized.

7. *Tumor.* Gastric tumor appears when the disease is past the curative stage. It is very sad that one should wait till he can hold a cancer in his hand before recognizing it.

Finally enlargement of lymph glands in the supraclavicular and inguinal regions, with secondary growths first in the liver, indicate metastasis. In this stage, the disease is general carcinomatosis rather than cancer of the stomach.

Cachexia appears often as early as three

Craft palsy, writer's cramp, have been cured by hypnos of strychnine after failure of other measures.
—Phillips, *Med. Brief*.

Franklin as a vegetarian lived comfortably on one fourth the amount which his brother had been paying for his board.

months from the beginning and is the first sign of impending death.

The average total duration of the affection is one year, rarely over two years.

Diagnosis.—Apparently causeless, progressive dyspepsia of two months' duration with even a trivial loss of flesh and strength in an individual past 30 years of age, strongly suggests gastric cancer. If to these are added the signs of incipient or actual pyloric obstruction, even though this be slight, exploratory celiotomy is indicated. This should be done before the formation of an obvious tumor. The importance of early diagnosis must be emphasized.

Carcinomatous infiltration must be differentiated in young adults from the cicatrization following benign gastric ulcer. In individuals past 35 years, such infiltration is generally malignant.

Addison's disease, pernicious anemia of extra-gastric origin, tuberculosis, chronic malaria, chronic nephritis, chronic hepatic and biliary affections, chronic pancreatitis, visceroptosis and particularly gastropptosis

and other causes of chronic gastritis must all be differentiated, though this is generally easy.

In none of these affections are the signs of gastric catarrh so apparently causeless and so persistent in spite of treatment to the stomach. The appetite in gastric cancer is persistently poor, never recovered and ends in disgust for food. Only after lavage is a single full meal relished and this is not digested.

The other organs must be examined with a view to differential diagnosis, collateral diagnosis and to detect evidences of metastasis and amyloid degeneration.

Sarcoma of the stomach is a rare affection. The early, progressive and persistent indigestion with rapid emaciation resembles carcinoma. Sarcoma occurs at an earlier age, the tumor grows rapidly and to a greater size. There is generally fever, marked gastric bleeding, splenic enlargement and often small cutaneous sarcomatous nodules about the umbilicus.

Richmond, Virginia.

SUGGESTIONS IN THE CARE OF HERNIA.

BY C. FLETCHER SOUDER, M. D.

PROBABLY on account of the few cases they meet physicians are very liable to simply refer their hernia patients to truss establishments, then pay no further attention to the matter. While truss dealers should naturally be looked upon as better judges in the selection of a truss, owing to the numerous and often irresponsible sources from which trusses are obtained, it is certainly advisable for physicians to see for themselves that their patients have been properly fitted.

Truss-fitting is an art and frequently calls for a high degree of skill. As the future

safety and comfort of the patients are involved great care should be exercised in the selection of a truss.

A patient informed me recently that he secured a truss within half an hour after being ruptured but a suitable truss was not applied and his condition became worse and worse. When I first saw him the hernia was the size of a base ball and extended to the bottom of the scrotum although he had a truss on at the time.

The French pattern truss is the kind most frequently applied. In theory it has the correct bearings, exerting the greatest pres-

Canadian nurses are said to be preferable to American, the former having steadier nerves and being obedient.

Clayton advocates a more liberal diet for typhoid cases and records 26 recoveries under such a regime.
—*Med. Record.*

sure in an upward and backward direction, but it has failed to perform its work satisfactorily in most of the hundreds of cases where I have seen it used. It generally fails to exert sufficient pressure at the internal ring if the hernia be indirect, consequently it only requires slight coughing or exertion to allow escape of the hernial tumor below the pad, which can be easily detected by placing a finger below the pad and have the patient cough; if marked pulsation is felt the truss is not doing its work well. As it exerts the greatest pressure directly over the external ring, the hernial mass may be in the canal but not able to protrude through the external ring. Another great fault is its tendency to ride over and bear heavily upon the pelvic bone and leave the canal unsupported.

When an elastic truss is employed it is necessary to make frequent adjustments due to the stretching of the body band.

It is a mistake to make light of a small hernia and dismiss the subject by merely advising the patient to secure a truss if the hernia become larger or troublesome. The best time to attend to a hernia is as soon as it shows evidence of appearing or as soon after it has appeared as possible. A hernia may remain small for years, then all at once become large and almost impossible to retain with any truss.

As a rule, persons after middle life suffer most from hernia as the muscles then have lost much of their firmness and retaining power, consequently it generally requires a truss exerting greater force to retain it.

The past week I was called to reduce a large scrotal hernia that had become strangulated. The man was ninety-two years of age and he had had a double hernia for forty years. He neglected the matter until finally they became so large and painful that he sought relief. When he did so his condition

was such that the truss dealers whom he consulted were unable to apply a truss that would both hold the hernia and could be borne.

Truss dealers are often unjustly found fault with because they are unable to furnish a truss that is entirely comfortable. If those needing trusses would attend to the matter while it is easy to do so, they would save themselves much suffering and annoyance in the future.

INJECTION TREATMENT.

A prominent fitter of trusses informed me that he often wished he could employ the injection treatment to contract the rings when they were large as he could then employ a truss with less pressure. Most of the fluids used in the injection method have contracting as well as irritating properties, thereby drawing the rings to their normal condition at the same time the plastic exudation produced is knitting the parts together.

I depend principally on; zinc sulph., gr. 3, guaiacol, min., 3; creosote (beechwood), min. 3; fluid extract hamamelis, dr. 1-2; alcohol, dr. 1-2; glycerin, dr. 1. M. Sig. Inject two to five drops once a week.

Advantages—By means of this treatment, the rings in nearly all cases of hernia can be entirely closed and retained in that condition with proper after-care; it offers a large percentage of permanent cures; if a complete cure cannot be effected, the condition can be greatly benefited; it is practically free from danger when properly given; it is adapted to all ages; patients may continue at business while undergoing treatment which is a great advantage to most of them; and many patients will undergo this treatment who would not submit to the cutting operation.

Philadelphia, Pa.

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These suggestions are excellent. At the same time the physician will do well to urge the

Meier finds that in chloroform poisoning life may probably be saved by huge doses of strychnine.—*Med. Record.*

Lauredeau praises hyosine as the best agent to relieve the severe pains attending childbirth; full, repeated doses.

wisdom of submitting to operation for radical cure. As we say elsewhere (page 1202), the operation is almost devoid of danger—

far less dangerous than the hernia, which not only causes life-long inconvenience but may even endanger life.—E.D.

DYSMENORRHEA.*

BY THOMAS OWINGS, M. D.

IN the treatment of painful menstruation my treatment has been thoroughly eclectic, hence very satisfactory both to the patient and to myself. To the best of my knowledge, relief, in a measure more or less complete, was given in every case. In many the relief has been permanent to the present time. I have used none of the opiates. Neither have I encountered extreme cases.

A simple classification of the forms of dysmenorrhea is all I shall give. I shall speak only of those forms with which I have had experience in my practice.

The most common form is that which resembles neuralgia. It may be uterine, ovarian, or both together. A less common variety is that caused by some obstruction to the egress of the discharge from the uterus.

The uterine-neuralgic is due to an altered state of the uterus or surrounding parts. It is known by pains in the back, hypogastric tenderness, tenderness and soreness of the uterus without interference to the flow. The pain usually continues throughout the period.

Uterine irritability from whatever cause calls for macrotys; this given in hourly doses of four to ten drops of specific medicine gives prompt relief. Other indicated remedies are also sometimes essential. External applications, as hot clothes, hot-water bottles, libradol, aid in all cases and are required in severe cases for their comfort-

ing effect. Rest in the recumbent position is advisable in all cases, especially in the severe ones.

The ovarian-neuralgic is known by the pain in the region of the ovaries. Tenderness in these regions is extreme when elicited by manual palpation.

The breasts are often sympathetically affected. Mental depression may be a marked symptom and was in one which I have treated. Pain, usually precedes the flow for several days. The medical treatment, at the time of the pain, is pulsatilla every hour, doses of five or six drops. The rest in bed and hot applications are also useful here.

In those cases due to some kind of obstruction, as intrauterine growths, versions or flexions of the womb, or narrowing of its lumen, the treatment is mechanical. Growths are to be removed, stenosis dilated, versions corrected by soft or hard rubber ring-pessaries. Flexions are treated many ways. Pessaries often assist. Dilation of the os under anesthesia relieves the suffering for some months. In some, surgical aid is the only relief.

Dysmenorrhea is altogether too common. Especially is this true of virgins and there is scarcely anything so capable of prompt relief.

In all cases of whatever variety or cause I begin the treatment with uterine tonics, and if it is found necessary I later press the need of an examination in order to find, if possible, the existing and exciting cause.

*Read before the Illinois Eclectic Medical Association.

Scopolamine given to relieve pangs of childbirth so affected the infants that some required artificial respiration.—Lauredeau.

Our materia medica has been buried under an avalanche of proprietary commercialism; it will take a generation to uncover it.—A. C. Ragsdale.

Often the tonic is sufficient when taken for two or three weeks to cause the next period to be quite a bit less painful.

Helonias (unicorn root) when there is a fulness and heaviness in the pelvis, with a bearing down sensation, as if the parts were about to fall out, acts promptly. With helonias, viburnum prunifolium can be added if there is pain in the back, with deficient flow with uterine tenderness. Also if there be cramp-like pains viburnum opulus can be added to advantage.

Caulophyllum works well in many of the above symptoms and can be given when the periods are irregular.

Mitchella should not be forgotten for the chronically congested womb, and in enfeebled uterine nervous system.

Any or all of these can be combined and given regularly for two, three, or four

months, as needed to effect a cure and insure quiet, lasting relief, at least until something arises to cause renewed irritability of the parts.

One young lady, 18 years of age, whose menstrual periods had always been more or less painful and depressing and in whom the mental disturbance at those times was enough to frighten the parents seriously, after taking for about four months a tincture of the above remedies in a compound, in teaspoonful doses four times a day, with the aid of macrotys and pulsatilla at the menstrual periods, is now enjoying almost perfect immunity from suffering and all the other symptoms are absent. This cure came after five years' treatment under various other doctors, in which her mother says she experienced no relief.

Hinckley, Illinois.

A CASE OF APPENDICITIS PRESENTING SOME DIFFICULTIES OF DIAGNOSIS.

BY FRANK WARNER, M. D.

Professor of Operative and Clinical Surgery, Starling Medical College, Columbus, Ohio.

RECENTLY I was called in consultation with Dr. Essington, of Somerset, Ohio, to see a young lady 19 years of age, who was, and had been, suffering periodical attacks of abdominal pain for two years previously. When I saw her, she was just emerging from one of her periodical attacks. The pain and the tenderness was referred to a rather limited area just to the left of the umbilicus. In this same region was a rather vague, but slight swelling, which could be discerned on palpation.

If such a line of symptoms had developed in the right inguinal region, it would have been very easy to devine what was the cause;

or even with the pain in this situation had the usual tenderness and rigidity of the abdominal muscles been confined to somewhere near the usual seat of an appendicitis, it would have simplified the diagnosis very materially. But the pain, the tenderness, the abdominal rigidity, all being away from the usual site of an appendicitis, naturally give rise to some uncertainty of the diagnosis.

An operation was made by opening the abdomen in the median line, just below the umbilicus, so that I might deal with the appendix in case it were found in its usual position, and if it proved to be the cause of the trouble, and that the pain and tender-

St. Louis Clinique suggests a national law forbidding the pollution of rivers with sewage and similar impurities.

The presence of the pneumococcus in the blood of a patient does not prove that pneumonia is present.—Upshur, *Va. Med.*

ness in the left side were simply referred from the appendix. But as I proceeded with the operation, it was at once found that the appendix was not to be found in its usual position. But by running a few coils of intestine through my fingers, the appendix was soon brought up from the left side of the umbilicus, and almost in a line with it. The colon had become slightly swung around from its normal position, carrying, of course, the appendix with it. The appendix was found to be swollen and

inflamed, and the peritoneum was greatly injected over the intestine for a number of inches.

Of course, referred pain from an appendix is very common, and it is said that the appendix may be found anywhere within the abdominal cavity, but it must be rather uncommon to find it other than in its normal position, or somewhere near this location. In this respect this case is interesting.

Columbus, Ohio.

CLINIC DAY AT THE EMERGENCY HOSPITAL.

BY E. B. SMITH, M. D.

Professor of Principles of Surgery and Clinical Surgery, Michigan College of Medicine and Surgery, Detroit, Michigan.

CASE I. Extrauterine Pregnancy—Septate Uterus.—The first case this morning is Mrs. Donald A., aet. 24 years, from the upper part of Michigan. She has been married four years, has one child two years old and gives a history of four miscarriages.

Upon the removal of the antiseptic dressings you note an external enlargement of the abdomen to the left of the median line, low down, about the middle of a triangle formed by the tubes, umbilicus and the anterior superior spinous process of the ilium: Considering the position of the enlargement, and the fact that the subject is a female, the lesion may be some form of hernia, a tumor of the uterus, broad ligament, ovary, or some other form of pelvic tumor. A subsequent digital examination with the history of the case suggests our diagnosis of extrauterine pregnancy. The operation is made to determine the nature of the pelvic growth and to remove it if possible.

Dr. Shellfish now having the patient thoroughly under chloroform, with one

uninterrupted sweep of a narrow-bladed knife, we reach the abdominal muscular tissues, part them with the index fingers, and picking up the peritoneum, rolling it meanwhile between the thumb and finger, thereby ascertaining that there is no other tissue within our grasp, we incise the peritoneal opening sufficiently to introduce the index finger, which is used as a director. Before opening the peritoneum, we place the patient in the Trendelenberg posture and manipulate first the contents of the pelvis so as to remove all the intestines from this cavity. You will note that the intestines gravitate to the upper part of the abdomen and that this tumor-like enlargement in the pelvis looks dark, which is typical of extrauterine pregnancy and verifies our diagnosis. We part the peritoneum to the same length as the external opening. Some of the intestines refuse to be gravitated out of the pelvis, on account of the adhesions. The omentum is enlarged, and with a number of loops of the intestines, is bound down to the uterus, its appendages, and to the walls of the pelvic cavity.

Pneumococci have been found in the blood in tonsillitis, otitis, arthritis and in pulmonary edema.—Upshur, *Va. Med.*

Pneumonia: I do most heartily condemn cold sponging or local applications of ice under any circumstances.—Upshur, *Va. Med.*

The first thing to be done is to strip the omental adhesions and this is accomplished with pieces of gauze wound on the fingers. Wherever hemorrhage appears, we control with ligature. When ligating with catgut you will notice that I make the third knot. That is to prevent slipping or untying when catgut becomes impregnated with moisture.

In removing an old mass of adhered omentum, I find two distinct bodies. After removing one of these bodies, which you see is a uterus, I ask Dr. Case to insert his finger in the vagina. He pushes up the second mass, which I make out to be a second uterus. These two uteri were joined by a thick septum. The remaining uterus is somewhat undeveloped; the one removed proves to be well developed.

The case, gentlemen, is a unique one; the patient has two uteri, an extrauterine pregnancy, with history of previous pregnancies as noted above. For a considerable time she has been suffering with her present condition, is very weak, and anything but a favorable subject for operation. As we have removed all pathological conditions and controlled all hemorrhage, we will close the abdominal wound without drainage. The abdominal wall is sutured layer by layer.

CASE II. Papilloma of Nose.—Mrs. F. H. K., a woman of presumably fifty years, comes to us with a papule on the right ala of nose, which she complains of being very painful. This is a frequent history. Diagnosis is papilloma. Our present treatment will be hydrargyri oxidum flavum, one-half dram to an ounce of lanolin. It is not good practice to use caustics upon these growths, especially with a subject of this age, as the irritation thus caused may bring about a malignancy, which very often follows this line of treatment. If this does not give relief, we will resort to a radical operation of extirpation.

Pneumonia: The use of suitable remedies promptly in every case may not, often will, make the difference between life and death.—Upshur.

CASE III. Syphilitic Callus.—Mr. F. B., aet. 60, with a marked callus in the left nasal bone. You will notice also a little callus growth on the right side. Callus of superficial bones indicates some specific trouble and we will prescribe unguentum kali iodidi with internal medication of iodide of potash given in the usual manner.

CASE IV. Fracture of Leg.—Mr. G. S., aet. 44. On Oct. 19, 1905, this man sustained a compound comminuted fracture of the leg at the junction of the inferior and middle third. When first seen there was considerable hemorrhage and the parts were in anything but an aseptic condition. After the parts had been thoroughly treated with antiseptics, every precaution was taken to remove the foreign materials. All hemorrhage was controlled, drainage established with aseptic gauze, and posterior and lateral splints applied at the first dressing. The swelling is now entirely reduced. Several pieces or spiculae of bone have been removed and on account of the delayed union we will apply plaster of paris bandages, enveloping the limb from the toes to the middle of the thigh. This will control all movement and allow the patient to move about outdoors, and will also gorge the parts with blood, all of which will assist in bringing about a callus.

CASE V. Talipes equinus.—Otto S., aet. 6. Congenital paralysis of the anterior muscles of the leg with contraction of the posterior muscles of the leg. This child did not walk until he was three years of age and then upon his toes only. No history of injury. Under anesthesia we manipulate the posterior muscles, stretching them and placing the foot in an exaggerated flexed position by means of plaster of paris splints so that the child will walk upon his heels. This splint will be kept on for two or three weeks; then manipulation kept up for a number of weeks.

Pneumonia: Sparteine is an invaluable adjuvant to strychnine, and caffeine, too, is an agent deserving our confidence.—Upshur, *Va. Med.*

CASE VI. Colles' fracture.—Mr. P. C. G., aet. 36, with Colles' fracture. This we reduce under anesthesia and when completely reduced put on an anterior splint. This is one of the fractures in which anesthesia must be always used and if there is an impaction, it must be reduced. When so treated the results are generally good. When not reduced under anesthesia a vicious union is the result with a painful wrist and hand.

CASE VII. Potts' Fracture.—Mrs. A. W., aet. 60, with Potts' fracture. This fracture is more easily reduced than the Colles' and after it is reduced we invert the foot markedly, keeping it at right angles to the leg. With lateral splints well bandaged at ankle and leg we bandage it firmly in this position. The results in this case should be good.

CASE VIII. Possible head-injury.—Mr. Chas. L., aet. 58. This man is suffering from delirium tremens and is brought before our service for the purpose of eliminating any brain trauma. We can arrive at a fairly correct diagnosis in this case by exclusion. The urine has been withdrawn, and we note that it shows no albumin, which eliminates albuminuria. The face is flushed, somewhat bloated, and the eyes are congested. We note that the pupils are evenly dilated and that they respond to light. The movements of the extremities are normal, eliminating fracture and apoplexy. The test for alcoholism, pressure on the superior orbital nerve, elicits a partial response from the patient, and our diagnosis is one of uncomplicated alcoholism.

CASE IX. Scoliosis.—Miss V. M., aet. 18. This young woman, you will all remember, has been coming to our clinic for the past year or more. Her case is one of spinal trouble. There is a left lateral curve (scoliosis) at dorsal region compensated at cervical region with a backward curvature (kyphosis) involving the fifth, sixth, seventh,

eighth, and ninth dorsal vertebrae. She has a family history of tuberculosis but no traumatic history. The girl's work requires constant use of the right hand, and while working she leans well over to the right side. While this posture may have been a factor in exaggerating her disease, the family taint has aided in the breaking down of the bony supports of the intervertebral bodies. Yet, I believe, you see the effect that muscular force exerts in producing this bony deformity. The treatment consists of constitutional remedies to build up the nutrition of the body, pure air, wholesome and easily digested foods and correction of vicious muscular action. If there is breaking down with caseation of bony or soft tissue, fixation to bring about physiological rest is the only hope to prevent abscesses and extensive destruction. The plaster of paris jacket is the cheapest and most convenient for the purpose. Ankylosis is the most to be hoped for in these cases which have shown symptoms of disintegration. When there is no inflammatory lesion the case is one of muscular deformity. Then proper manipulation and proper muscular exercise will correct conditions.

CASE X. Fracture of finger.—Frank W. H., aet. 18. In striking another boy with his fist he fractured the head of the third phalangeal bone of the second finger. The treatment is a palmar splint, retained by narrow adhesive strips of plaster attached to the splint to the dorsum of the finger, after which a roller bandage is applied.

Detroit, Michigan.

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An interesting article, showing the wide diversity of the city surgeon's experience. Best of all it is full of helpful hints and deals with cases which come within the scope of the general practitioner's daily work. It's the ability to handle successfully these

Pneumonia: Sparteine has the power of making the irregular pulse fuller, steadier and slower than any other known agent.—Upshur.

Pneumonia: Of the exhibition of digitalis I do not think very well; it is a remedy of uncertain action.—Upshur, *Va. Med.*

every-day things which counts; and we better doctor. The country doctor ought welcome to our columns everything which to be a good practical surgeon who can will help to that end—to make the doctor a “do things.”—ED.

PAROTITIS FOLLOWING ABDOMINAL AND PELVIC OPERATION.

BY CLARENCE D. SELBY, M. D.

IN the March issue of the Journal there was an article relative to the etiology of parotid-gland inflammation following abdominal and pelvic operations, which the author terms, “Celiac or Splanchnic Parotitis.” His theory may be expressed in the following quotation: “Most probably celiac parotitis results from the action upon the parotid glandular substance of peculiar toxic bodies which have been absorbed into the blood.” And he suggests as the portal of entry of these toxic bodies, “organs altered in function by traumatism or pathologic process,” and the alimentary canal, either by microbic activity or disturbed digestion.

While not wishing to antagonize this theory which Dr. Dorland has cleverly presented, I do wish to advance what may at least be a contributing factor in the etiology of this rather interesting condition. I speak of the manipulation of the jaws of patients, who in the anesthetic state have a persistent tendency to “swallow the tongue.” It is quite reasonable to suppose this manipulation by pressure of the fingers back of the

angle of the jaw would in the course of a more or less prolonged operation produce no small degree of parotid traumatism, or in other words, a *locus minoris resistentia*. Following this weakened resistance, we have the parched throat of the anesthetic recovery and consequent increased buccal bacterial growth, which is quite free to extend directly through the unwashed Stenson’s duct, by virtue of diminished salivary secretion, to the injured gland. The natural result is parotitis.

This theory is suggested by cases observed in other operative work.

[In the last case of suppurative parotitis occurring in my pelvic work, Dr. Selby’s explanation will hardly satisfy; the patient had no chloroform nor ether—ovariotomy being performed under hyoscine-morphine anesthesia—yet on the fifth day the right parotid gland swelled up like mumps; in two hours the face was enormously distorted, and the patient nearly died, though the abdominal wound healed perfectly.—Lanphear.]

East Toledo, Ohio.

SURGICAL NOTES

FRACTURES OF THE HEAD OF RADIUS.

The x-ray has shown that fractures of the head of the radius are common instead of rare as taught heretofore. It shows that in the uncomplicated variety (probably

the most frequent), a vertical line of fracture separates the anterior third or half of the head. Thomas says: In a fall on the hand with the elbow extended, only this portion of the head is in contact with the capitellum of the humerus, so that the

Von Behring emphatically denies that adult pulmonary tuberculosis is ever contracted through the respiratory tract.

In trying to scourge the active principle men our friends have tread heavily on the toes of the tablet makers. Hear ‘em yell!

downward impact breaks it off; the resistance of the intact coronoid process prevents separation of the fragments and consequent rupture of the orbicular ligament; the lines of fracture on the upper surface of the head tend to radiate from the periphery towards the center, so that when less than a half of the head is detached the small fragment is angular in shape; it fits closely into a corresponding depression in the remaining portion of the head, and is held there by the untorn orbicular ligament. As a result, the head will move as a whole within the ligament, movement of one fragment on the other being impossible. Sometimes the line of fracture is straight, especially when the detachment includes half of the head, and in these cases crepitus will be possible. Absence of crepitus in the presence of positive fracture is peculiar, but the localized and severe pain and tenderness, and the limitation of motion in the elbow, are sufficiently characteristic to establish the diagnosis in most cases, much more so than in the average case of fractured rib. The fact that this fracture is always intracapsular makes it important from the standpoint of prognosis, although the close splitting of the fragments by the untorn orbicular ligament favors a good result in most cases. It is probable that most of the obscure "sprains" of the elbow, followed by more or less ankylosis, are in reality fractures of the head of the radius. Fixation of joint for three weeks is all the treatment usually needed. It will rarely be necessary to excise the head of the radius, as is done by Stimson in most of his cases, or to excise the detached fragment, as is done by Chevne.

DUMB-BELL ANASTOMOSIS.

A new method of performing end-to-end anastomosis in intestinal surgery is de-

The physician who treats names will soon be well represented in the cemetery, says E. H. Moore, in *Medical World*.

scribed by Dr. J. B. Bacon, of Macomb, Ill. By a very ingenious device, which he calls a dumb-bell instrument of his invention, one is able to make a circular enterorrhaphy in almost as quick time as with the Murphy button; and with less danger in unskilled hands, he claims. A reprint descriptive of the method of use will be mailed by Dr. Bacon on request.

AN EASY AND SAFE WAY TO STERILIZE THE HANDS.

Dr. Torgny Anderson, of Ceresco, Neb., writes: Over three years ago I began using the following method for sterilizing the hands before operations, dressings, etc., and during this time I have had no infection I could trace to contact with my hands. The method being easy and safe ought to be welcome to every physician and surgeon. I make a mixture of equal parts of hydrogen dioxide (full strength) and liquor potassae. Of this mixture I pour about one teaspoonful in the hollow of one palm and thoroughly wash my hands with it. Then I carefully clean the nails and then pouring a second teaspoonful the same as before, saturate the nail brush and go over the whole surface of both hands, taking special care to scrub under and around the nails. After this is done I pour the third and last spoonful in the hand and wash thoroughly in it for about three minutes. Then I scrub the hands thoroughly with thymol soap (any other liquid germicidal soap would do I suppose) and rinse them in either sterilized water or in bichloride solution 1 to 1000.

This sterilization makes the hands soft and white. Experience with this method in cases ranging from a small sore to laparotomies has led me to place absolute reliance upon it. I have often used this to sterilize the skin of patients before operations and with the same

See in *Progress* for February a valuable discussion by Prof. Peck, of the Present Status of Homoeopathy as a separate school.

success. [It is doubtful if this method would be found by bacteriological tests to be absolutely perfect but since it has given satisfaction in Dr. Anderson's hands it is worthy of use in case one cannot make use of one of the more elaborate methods. It would be well—"to make assurance doubly sure"—to wash the hands for two minutes in dilute alcohol, one-third water to two-thirds alcohol, before the final rinsing.—Ed.]

SURGICAL TREATMENT OF PYLORIC STENOSIS.

In a paper read before Golden Belt District Medical Society, Dr. A. L. Blesh, of Guthrie, Ok., maintains that so-called idiopathic dyspepsia is comparatively rare; that functional dyspepsia and indigestion have their origin quite commonly in a narrowing of the pylorus, which interferes with normal drainage of contents. This narrowing is sometimes congenital, but more often due to cicatricial contracture following the healing of pyloric ulcer.

Of late it is being found out that duodenal ulceration is not uncommon—either independent of or associated with pyloric ulcer. Ulceration being the most common of the causes of obstruction from within, so likewise are adhesions the most frequent exciting factor from the outside of the lumen. These may be caused by localized peritonitis, due to gall-bladder infections, pancreatitis, etc. The result upon the stomach of outlet stenosis depends upon its completeness. It is usually the symptom-syndrome of indigestion, and extends over many years' duration, growing ever progressively worse. Putrefaction of stomach contents, and dilation and atony are among the later manifestations. So likewise is a residuum. The predisposition of ulcer to ultimate cancer formation—the so-called cancer on an

ulcer base is discussed. The treatment of this condition is essentially surgical, and is to be summed up in the one word, "drainage." Medicines are of use only as they act as antiseptics on the fermenting, putrifying stomach content, and thus control, to a degree, putrefaction and fermentation with consequent gas-formation and stomach-distension. Muscular power of stomach is insufficient to force a normal food supply through the narrowed outlet, so muscle excitants and tonics are of no avail. Lavage is superior to medication of any kind. This may be dangerous in the stage of acute ulceration. As to operative procedures for its relief, after discussing the various operations preference is expressed for the Moynihan operation, which is a posterior gastro-enterostomy without loop and with suture. There being no loop of jejunum, and the stomach being tapped at its lowest point there is very little danger of establishment of "vicious circle," and an enterostomy is unnecessary, and with this latest technic is quite impossible. The two organs, stomach and jejunum are anastomosed at the point where they normally lie almost in contact. A plea is made for early rather than late operations.

The present results, good as they are, are all founded mostly upon late work.

The technic of the Moynihan operation is described minutely, and a few illustrative case-reports appended.

TREATMENT OF BOILS.

The editor of *Medical Summary* says: If the patient be seen early enough, it is always proper to attempt to abort a boil, since such treatment does not aggravate the condition if the effort fails, and much suffering is avoided if the attempt proves successful. The boil should be kept well covered with

Look up the *Western Druggist* and see what the extreme men among them ask of legislation in the way of privilege.

Peppermint cultivation is most profitable on muck lands, former marshes reclaimed by drainage.—Circular, Agric. Dept.

a tampon of cotton which is kept saturated with the following solution:

Chloral..... 9. (2 1-2 drs.)

Glycerin,

Water, aa.....20. (5 drs.)

Certain observers, working along the theory of the destruction of the staphylococcus, bathe small boils frequently with a lotion of salicylic acid in alcohol, 2 per cent; or a 50 per cent plaster of the same, changed four or five times a day to hasten the necrosis in large boils. In furunculosis involving an area of considerable size, a 2 1-2 per cent ointment of salicylic acid in vaseline may be applied once a day, after gentle washing with soap and warm water. Either ordinary lime water on compresses covered with oiled paper or silk, or a solution of calcium chloride applied in same manner, will promote suppuration more quickly than the ordinary poultice. A 25 per cent solution of ichthyol, applied every two hours, will diminish the area involved in inflammation, and consequently lessen the pain and shorten the duration; while certain experimenters, also, assert abortive power for the same application. A saturated solution of common baking soda applied on a compress will relieve the pain of a boil at any stage. If applied in the very incipency, 20 grains of silver nitrate in an ounce of sweet spirit of niter, painted frequently over the inflamed surface, will abort many forming boils.

OPERATIVE TREATMENT OF AMEBIC DYSENTERY.

When a case of amebic dysentery is doing badly, i. e. when there is a reasonable amount of strength left, but internal treatment is not controlling the dysentery, there should be no delay in operating. The abdomen should be opened as for appendi-

citis (except that a three or four inch cut must be made) the cecum drawn up into the wound and sutured to the parietes—the appendix being removed. Next day the cecum should be widely opened and colonic irrigation with strong solution of quinine instituted. A rapid movement usually follows the beginning of irrigation, but convalescence is slow, and at times difficulty is experienced in closing the fistula. The after-treatment (irrigation, etc.) is tedious, and the patients are offensive cases to have in hand; it is very disagreeable to thus treat patients in hospital wards, but it saves lives in selected cases.

FOR "BLACK EYE."

Ecchymosis, following a blow about the eye or temple, is sometimes very annoying. Circumstances are often such that it is necessary to absorb the blood quickly and to disguise the extravasation while undergoing the healing process. Temporary discolorations of the skin may be disguised by the application of grease, paint, or collodion, colored by means of a little carmine. As a lotion the following is recommended: Ammonium chloride 1, alcohol 1, water 10. Dilute acetic acid may be substituted for half the water and the alcohol may be replaced by tincture of arnica with advantage in some cases. Another good lotion is: Potassium nitrate 1, ammonium chloride 2, aromatic vinegar 16, water 240.

INGUINAL HERNIA IN YOUNG CHILDREN.

A very earnest plea for operative treatment in all cases of inguinal hernia in young children is made by Dr. E. W. Peterson, of New York City, in *American Journal of Surgery*. He says the majority of sur-

Optimism paints the pathway of life with the golden hues of possibility; paves the way with stepping stones.

"I can't" never surmounted an obstacle; never lifted a man out of the slough of despond; never urged a man on to success.

geons advocate the mechanical or truss treatment of uncomplicated hernia in early childhood, but give the following exceptions to the general rule: Operate (1) in case of strangulation, or where strangulation has been reduced by taxis; (2) upon all cases not controlled by truss; (3) when truss-wearing causes pain; (4) when the patient cannot be observed regularly; (5) in cases associated with reducible hydrocele, or fluid in the hernial sac. But operative treatment being perfectly safe, and absolutely sure to effect a cure if properly done, every patient should be subjected to the Bassini method, which deservedly occupies first place in the treatment of inguinal hernia for it deals thoroughly with the sac and with the canal. There are two points in this operation deserving of special emphasis: First, in splitting the aponeurosis of the external oblique, the division should be made in the cleavage line, as high above Poupart's ligament as possible; if the division is made directly over the inguinal canal, the lower flap of aponeurosis is so short that it is difficult to put in the second row of sutures without tension and subsequent danger of sloughing and splitting. The longer flap obviates this danger and gives a stronger wall. The other point is this: Lloyd has demonstrated that in recurrences, the relapse is at the lower end of the wound, and the rupture is of the direct type; therefore, it is of the greatest importance to accurately coapt the internal oblique and transversalis muscle to Poupart's ligament at the lower end of the wound. Children bear surgical work remarkably well, and there is no major operation in surgery attended with as little shock and giving as satisfactory results, as the operation for the radical cure of inguinal hernia. The curability of rupture in early childhood by operation is a settled question. The safety

of the method is generally acknowledged. The only question then is, shall we operate or shall we apply a truss? The former plan requires about two weeks to effect a cure, the latter requires two or more years, and is far more uncertain.

HERNIA.

It is said that one in every eight men has some form of hernia. Yet how many doctors think of advising an operation? They know that operation is perfectly safe and cure almost certain (in my own work—now covering several hundreds of cases—there has never been a death and less than five per cent of recurrences); yet they prefer merely to fit a truss rather than urge radical cure. It is hard indeed to account for their indifference to the future welfare of their rupture cases. Probably timidity and a feeling engendered by the failures of a few years ago, that cure is not sure. It is the duty of every doctor to explain the advantages of operative treatment to every patient afflicted by hernia and only permit the wearing of a truss under serious protest.

SUCCESS IN SURGERY.

In a recent address on "Requirements for Success in Surgery" Dr. L. C. Boshier, of Richmond, Professor of Surgery in the Medical College of Virginia, said, that the first essential is a thorough natural fitness for the work; second, a thorough, liberal education, including as much as possible of studies of a scientific nature, especially physics, biology and chemistry, in the order named. Next the very best available medical school should be selected where a complete "all-around" medical education may be obtained. After completion of the medical course a term of hospital service

A "druggist" proposes to add to his stock, now including sandwiches, oyster and chicken pies, pancakes.—*Western Druggist*.

Penna. cheap whisky is officially stated to contain wood alcohol, red pepper, sometimes arsenic, turpentine and prussic acid.

is now considered an absolute essential, and, if choice is possible, it should be in a hospital where the cases are seen under the masters in the profession, and where the interne's time is divided into service in the medical and surgical wards, in the order named, if he wishes to become a surgeon. In such a one he can learn the methods of the masters and responsibilities of a surgical assistant. Mere observation alone, however, will not suffice, but operations on the cadaver and on the lower animals are invaluable in acquiring technical skill without risk to human life. From the simpler operations on the patient, the interne can gradually advance to those more difficult as his skill and judgment improve. The best advantages of hospital training are obtained by the interne who gives his full attention to his duties, and he will thus gain the confidence of his superiors and lead them to entrust work of greater im-

portance into his hands. After finishing the medical course and the hospital internship, and perhaps also a term as surgical assistant, there are still generally months and even years before a special surgical practice can be developed, but this is an advantage rather than a drawback, as it favors the acquirement of the breadth of view which is sometimes notably absent in those who settle down too early into the practice of a specialty. In conclusion, he refers to the other indispensable requirements, health, energy, honesty, and temperate habits, as well as the incidental advantages of attractive personality and tact, here as in every other position in life. With those requisites one may count on a reasonable measure of success in the practice of surgery, and even the rare exceptions who are "born surgeons" would also be the better for them.

GYNECOLOGICAL NOTES

VOMITING OF PREGNANCY.

Dr. J. Whitridge Williams, of Baltimore, Professor of Obstetrics in Johns Hopkins University, says that the pernicious vomiting of pregnancy is not due to any one single etiological factor, but occurs as one of three varieties: Reflex, neurotic, and toxemic. (1) The reflex type is dependent upon the existence of abnormalities of the female generative organs, and may be cured by their correction. (2) The neurotic type is dependent upon the existence of a neurosis without demonstrable lesions, and is more or less allied to hysteria. It is the most frequent variety of serious vomiting and can be cured by "suggestion" or a modified rest-cure. (3)

The toxemic type is associated with characteristic changes in metabolism, and (in fatal cases, at least) with lesions in the liver analogous to those observed in acute yellow atrophy. It may occur in an acute or chronic form, the former causing death in ten days or less, while the latter may persist for weeks or even months. In reflex and neurotic vomiting there are no manifest changes in the urine, while the toxemic variety is characterized by a marked decrease in the amount of nitrogen excreted as urea and a characteristic increase in the amount excreted as ammonia, the so-called "ammonia coefficient" rising from 3 to 5 per cent to as high as 46 per cent in one of the author's cases. The toxemic type is diagnosed by the examination

A St. Louis victim of the whole wheat breakfast food habit had a 2-inch straw removed from his appendix.—*Western Druggist*.

What's the use talking high science to a doctor who would prescribe a 50-cent can of "Auntie's Flying Gustine?"

of the urine, the reflex by careful bimanual examination of the genitalia, and the neurotic after the exclusion of the other two varieties. The prognosis is excellent in reflex and neurotic vomiting, provided appropriate treatment is instituted, so that the termination of pregnancy is rarely indicated. In toxemic vomiting, on the other hand, a fatal issue can be averted only by the prompt induction of abortion, and even then the prognosis is dubious. [It is doubtful if the last expression is correct. If, at the very outset, one will institute Dr. Abbott's "clean out, clean up and keep clean" treatment, and withhold food by the stomach, abortion will rarely be needed.—Ed.]

PROLAPSE OF BLADDER.

Among women a frequent source of complaint is "irritation of the bladder"—cystitis, they are told by their doctors who proceed to dope them with tritium, hyoscyamus, salol, or various "proprietary remedies." What is needed in many cases is simply removal of urethral caruncle, prolapse of urethra or, generally, cystocele. It is so easy and so sure to make anterior colporrhaphy and then a close perineorrhaphy that it is astonishing why doctors do not more frequently try it. The relief afforded, even if there is no financial benefit, is sufficient reward for the extra trouble.

CANCER OF THE UTERUS.

It is in the matter of the early management of cancer of the uterus, however, that the family doctor deserves the most censure. Every year many dozens of women come to me with carcinoma uteri too far advanced for cure—the delay due almost always to the failure of the regular medical attendant to properly examine the patient on complaint

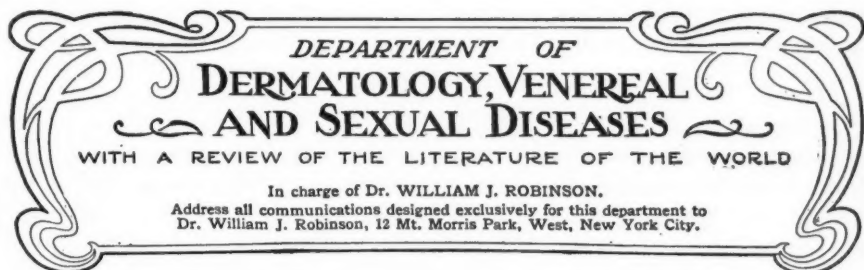
of suspicious symptoms. It does seem as if the medical profession is never going to realize the truth of the statement that *any show of blood from the vagina of a patient past the menopause is almost certain evidence of cancer* and demands instant and careful investigation! The successful management of cancer of the uterus requires early diagnosis. I have now operated upon more than 500 cases of cancer of the uterus; and have about 11 per cent of perfect cures; i. e. patients living more than five years after hysterectomy. I am sure the recovery rate might be more than doubled if doctors would examine every suspicious case and have operation performed as soon as the diagnosis is made.

GALLSTONES.

Thousands of patients suffer from gallstones and don't know it; almost as many thousands of doctors continue pouring pepsin and hydrochloric acid into stomachs supposed to be the source of "indigestion" or "dyspepsia" instead of examining carefully and ascertaining the true cause of suffering. A test breakfast and analysis of the stomach-contents can be made by any recent graduate (and many an older one as well)—but it is often regarded as "too much trouble." Nothing is too much trouble which will relieve a long-suffering "chronic." If more time were spent in careful examination of obscure cases and less in efforts to get more patients from competitors the world would be better off. The ambition of too many practitioners of medicine is to reach that frightful stage at which he can exclaim: "I am too busy to read medical books and journals." God pity the patient of such! In a very large proportion of cases unsuspected gallstones and cholecystitis will be found to be the cause of the indigestion and pain; removal will effect a cure.

My keenest regret is that I suffered myself to be annoyed by a lot of small people and picayune worries wasting God's good time.—Monahan.

The secret of all success is concentration of all energy and all endeavor upon that aim.—Ella Adelia Fletcher.



THE TREATMENT OF GONORRHEA AND ITS COMPLICATIONS.

INFORMAL CHATS WITH THE GENERAL PRACTICIAN.

BY WILLIAM J. ROBINSON, M. D.

II. LOCAL TREATMENT.

HOW soon should the local treatment of gonorrhea be begun? As soon as the patient applies for treatment, as soon as the diagnosis is made. I know that the older generation of physicians and some of the newer one condemn the early use of injections in gonorrhea. They advise waiting until the acute inflammation has subsided. They claim that the injections are likely to cause damage; increase the inflammation, cause complications, such as posterior urethritis, epididymitis, etc.

Their claims are not without foundation. It is quite true that *improper* injections, or proper injections *improperly* administered may cause great damage. For instance, the use of silver nitrate in the hyperacute stage will positively injure the patient, the use of irritating astringent injections, when mild gonocide solutions should be used, will aggravate the disease. But this is true of every disease and of every kind of treatment. Discrimination is necessary and nowhere is a little knowledge more dangerous than in the treatment of gonorrhea. But properly used, local treatment can prove only beneficial, and in my practice I can truthfully say, that I have not seen one case that was injured by the early use of injections.

Before I give the formulas for the various injections, with their indications, I wish to say a few words about the irrigation treatment, by the Janet method, popularized in this country by our friend Valentine. I have no doubt that those who use this method get satisfactory results from it, but I am not using it—or very, very rarely—simply because I am getting just as good (I, of course, believe better) results without it, and with much less annoyance, loss of time and expense to the patient. I might perhaps add that the number of partisans of the irrigation treatment is getting smaller and not larger. To give one prominent example: Dr. Hans Wossidlo, of Berlin, was one of the most enthusiastic advocates of the Janet method. When the writer worked in his polyclinic ten or eleven years ago, every case of gonorrhea was treated by irrigation. When I visited his polyclinic last year, there was not an irrigator in the place and he told me that he went back to the old method of hand injections, that the Janet irrigation treatment did not fulfill the claims made for it by its advocates, and that complications were rather more common under it than under other methods of treatment.

The injections I use, I divide into three classes:

I. Cleansing.

II. Bactericidal (gonocidal).

III. Astringent.

While these injections may be used interchangeably during one and the same period, still, as a rule, each class is indicated for a different stage of the disease. When a patient comes in a superacute condition, with the discharge, so to say, bursting forth, and the penis red, swollen and painful, then I use only the cleansing injections. But this stage under proper management never lasts longer than two or three days, and then the time comes for the gonocide injections. Many patients never have that very acute stage; that is, even a first or acute gonorrhea may start in and proceed with only moderate symptoms. In such case the cleansing injections are left out and the gonocide injections are commenced forthwith. The astringent injections are reserved for the last or declining stage, when there is but a drop or so of discharge and gonococci either entirely absent or very scant.

The most eligible cleansing solutions are a 1 per cent solution of borax or sodium bicarbonate or 1-10 per cent solution of sodium chloride. Boric acid is not very good for the purpose, for mild as it is, it is still nevertheless irritating, occasionally.

It is best to prescribe those solutions double the strength it is intended the patient should use them and direct him to dilute them half and half with boiling water. For it is important the patient should use the solution hot. If he can use it of a temperature of 45° C. (113° F.) he will kill two birds at one shot, because the above temperature is fatal to the gonococcus. But in the superacute stage of which we are speaking now, some patients are very sensitive to heat and cannot stand a higher tempera-

ture than 90° or 100° F. A higher temperature is not only painful but occasionally increases inflammation.

We must always remember the purpose of these injections: They are merely cleansing, and unlike injections of class II and III, they are not to be held in the urethra. They are injected and allowed to run right out. Of course, as with all injections, the patient must be instructed always to urinate before using the injection. If he cannot urinate at a given time, then he is to delay the injection until he can.

I. Formulas of cleansing injections.

1. Sodii boratis.....grs. 144 (10 Gm.)

Aquae destill. steriliz. pt. 1 (500 Cc.)

Mix with equal volume of hot water and inject two or three syringefuls *every* hour. (If you cannot do it so often, do it as often as you can).

2. Sodii bicarbonatis...grs. 144 (10 Gm.)

Aquae destill. steriliz. pt. 1 (500 Cc.)

Directions same as with injection No. 1.

3. Sodii chloridi c. p....grs. 30 (2 Gm.)

Aquae destill. steriliz. pts. 2 (1000 Cc.)

Directions same as with prescription No. 1.

Some use a normal salt solution (0.7 to 0.9 per cent). I don't consider it necessary to use the solution so strong.

We now come to the formulas for the gonocide solutions. There is no limit to the frequency of the injections. A patient will seldom use them as often as you tell him, but the oftener the better. If one would use the injections regularly every twenty minutes or half-hour, his urethritis would certainly be cured in a very short time. These injections are to be held in as long as possible—fifteen minutes (if the patient has the patience and perseverance), ten minutes or at least five minutes. If the patient (after urinating of course) takes the injection in the recumbent or semi-recumbent position, he will have less difficulty

The meliorism of the New Thought has a deeper sense of truth in it than either pessimism or optimism.—Salvarona.

Dying doesn't mean much. Cowards die, when they fear to live. Brave men live on and overcome the obstacles.—*The Nautilus*.

in retaining the solution as long as may be necessary.

The antiseptics that have been recommended as gonocides are many. The principal ones are mercuric chloride (corrosive sublimate), potassium permanganate, hydrogen peroxide, thalline sulphate, ichthylol and silver salts. Mercuric chloride is mentioned here only to be condemned in the most emphatic terms. It is a drug that works mischief with the urethral canal. The urethral mucosa is an exceedingly delicate membrane and must be dealt with gently. We must kill the gonococci, but we must not destroy the mucous membrane. I am satisfied in my mind that many cases of stricture, urethral erosion and other complications can be laid at the door of corrosive sublimate. Potassium permanganate is not one of my favorites. If used in strength to be efficient it is too irritating. Not that we cannot cure a gonorrhea with it alone, but there are better drugs, and in medicine the best is none too good.

Hydrogen peroxide is of little value as a gonocide. When I do use it, it is in very dilute solution as a cleansing agent, merely preliminary to the gonocide injection. A German physician recently claimed that peroxide of hydrogen drives the gonococci out of their recesses and brings them to the surface. Perhaps it does. And to use it as a preliminary to a gonocide solution is quite advisable. Thalline sulphate is a well tried gonocide and I use it frequently. Ichthylol I use in obstinate cases of a gleety character. But the gonocide drugs par excellence are the silver compounds.

The best known of silver compounds is silver nitrate. I use it very extensively in chronic urethritis, but to use it in acute gonorrhea is criminal folly. It not only increases the pain and the discomfort (often producing retention, strangury, blood in

the urine, etc.) but actually aggravates the disease. For the silver nitrate increases the discharge, and the more abundant the discharge, the better the gonococci like it; this is their pabulum and they multiply in it much more rapidly than in a urethra with but a scanty discharge. For this reason my endeavor from the first minute I get the patient is to reduce the amount of discharge in the urethra to a minimum; not by the aid of drying astringents, but by mechanical means; by frequently flushing the urethra with the syringe and by making the patient take lots of liquid, so that he is obliged to urinate very often and thus wash his urethra from within. And so nitrate of silver in acute gonorrheal urethritis is out of the question. Silver iodide, recently recommended, is of little or no value. Silver fluoride is irritating.

In short, the inorganic preparations of silver are not well suited for the treatment of acute gonorrhea. We must have recourse to the organic compounds. Here we are confronted with an *embarras des richesses*. We have protargol, argyrol, argonin, argentanin, argentine, argentol, nargol, largin, picratol, silberol, ichthargon, albargin, etc., etc. While I have given every one of them a pretty thorough trial, I shall not go into a consideration of the advantages and disadvantages of every one of them. I will simply state that practically I have limited myself to the first two mentioned, namely, protargol and argyrol. And while argentine, argonin and albargin are used abroad considerably, in this country the above two compounds are the only ones in general use.

Argyrol is an excellent silver compound and is the least irritating of all silver compounds. And in very irritable or sensitive urethras that is the silver compound of choice. Protargol, however, seems to be more penetrating and on the whole is more

There's something wrong with the woman who is content with a poodle, a French novel and a dude for company.—*The Nautilus*.

Don't get into a rut and crystallize there. You can't cook with the fire you had yesterday.—*The Nautilus*.

effective. An excellent way is to use, as I have been in the habit of doing for some time, the two salts alternately. That is, I will prescribe one bottle of protargol solution and one of argyrol and tell the patient to use the protargol one day and argyrol the next day, or to change with each injection. Under these injections the secretion diminishes, the inflammation subsides and the gonococci disappear rapidly.

II. Formulas for gonocide solutions.

4. Protargol 0.5
Aquea destill. 200.0

M. Ft solutio *lege artis*. Detur in vitro nigro.

S. Use one syringe-ful at a time (2 to 4 drams, depending upon the capacity of the man's anterior urethra, which I always measure) and hold in 5 to 10 minutes.

You must be sure that the solution of protargol is properly prepared. Improperly prepared it contains lumps and will prove irritating. The best way to make a solution of protargol is to pour the water into a wide graduate or a mortar, and then throw, with a sifting motion, the protargol on the water; it is light and floats. Leave it without shaking or stirring; in a few minutes it will be found to have become dissolved. As seen, I commence with a 1-4 per cent solution (1:400). The amount may be raised to 1 or 2 per cent, but I seldom go beyond 1 per cent.

5. Argyrol 10.0—20.0—50.0
Aquea destill. 200.0

Use the same way as the protargol solution.

6. Thalline sulph. 1.0
Aquea destill. 200.0

This is a one-half per cent solution; the strength may be raised to two per cent, but one per cent is generally the most satisfactory.

7. Ichthyol 4.0 to 6.0
Aquea destill. 200.0

This, as stated previously, is used only in

"dragging" cases and is good as an alternate injection.

When the discharge has become thin, serous and scanty, when the gonococci are practically absent, then it is, as a rule, advisable to finish up with an astringent injection. For this purpose we may use one of the following injections. (N. B. Alum, tannic acid and copper sulphate are very unsatisfactory astringents in gonorrhea):

III. Formulas for astringent injections.

8. Zinci sulphatis grs. 8 (0.5)
Aquea destill. ozs. 4 (120.0)

Inject three to four times a day.

9. Zinci sulphatis grs. 8 (0.5)
Plumbi acetatis grs. 8 (0.5)
Aquea destill. ozs. 4 (120.0)

Inject three or four times a day.

10. Zinci sulphocarbo-
latis grs. 16 (1.0)
Aquea destill. ozs. 4 (120.0)

11. Zinci sulphatis.
Plumbi acetatis, aa... grs. 8 (0.5)
Tr. opii dr. 1 (4.0)
Tr. catechu drs. 2 (8.0)
Aquea, ad ozs. 4 (120.0)

The following, however, is my favorite:

12. Zinci sulphatis .. grs. 4 to 8 (0.25 to 0.5)
Bismuthi subcar-
bon. (vel sub-
nitr.) drs. 3 (12.0)

- Bismuthi sub-
gall. dr. 1 (4.0)

- Hydrastis aquos. oz. 1 (30 Cc.)

- Pulv. acaciae .. drs. 1-2 (6.0)

- Aquea, ad ... ozs. 4 (120.0)

M. F. mistura *lege artis*.

Keep bottle flat and shake well before using.

This leaves a protecting coating over the urethral canal, exerting a soothing and healing influence. The coating remains in the urethra until the next urination. This injection finishes up the treatment.

The friend shows me what I am able to do, the enemy teaches me what I ought to do. My enemy is of great value.—Schiller.

The cause of the nostrum evil—the therapeutic nihilism of Osler and others looked up to as guides in medical practice.—*Med. Record*.

The complications of acute gonorrhea will be considered in the next chapter.

THE TREATMENT OF ECZEMA OF THE EYES IN CHILDREN.

After detailing the etiology and symptomatology of ocular eczema, Dr. Frederick Krauss, of Philadelphia (*N. Y. Med. Jour.*, No. 1439), gives a satisfactory outline of the treatment. The treatment, like that of most skin diseases, may be divided into (1) hygienic, (2) internal and (3) local. The hygienic treatment consists in fresh air (out doors when possible), good, nourishing, wholesome food, the withdrawal of all indigestible foods, sweets and pastry of all sorts, frequent bathing of the whole body, and in severe cases absolute rest in bed.

The room, when the patient is confined, should be large, airy and open toward the south and west, so that the sun can penetrate. The diet should be simple and nourishing. Fried foods of all kinds should be prohibited. The whole body should be given a bath daily, preferably with sea salt in the water. In the severer corneal lesions absolute rest in bed is followed by the best results, and in deep ulcerations it should be insisted upon.

The medical treatment consists of tonics to increase the appetite and digestion, and act as alteratives. When the bowels are constipated, small doses of calomel, gr. 1-20 to 1-10, three times a day, are indicated.

A favorite formula which acts as a tonic and alterative is the following:

Syrup. ferri iodidi.....drs. 4

Syrup. acidi hydriodici.....oz. 1

Syrup. hypophosphitum (simple or compound, according to the case).....ozs. 1 1-2

M. Sig.: Teaspoonful in water before

meals. In children of 12 to 15 years, drs. 2 are given.

In strumous or specific cases, syrup of hydriodic acid, dr. 1, three times daily, is found to act satisfactorily. In some cases small doses of arsenic act almost like a specific. Inunctions of cod liver or sweet oil are of benefit in weak individuals.

Attention must be directed to eczema in other parts of the body, but most particularly to that occupying the nares, and accompanied by a purulent discharge, the cure of which is a necessity. For this purpose, an alkaline cleansing wash, and a bland ointment, such as unguentum acidi borici, serve well.

The local treatment required in the milder cases of eczema of the conjunctiva is a simple boric acid wash, with perhaps the addition of a small amount of cocaine and adrenalin, if there is much congestion or itching.

Acidi borici.....grs. 25

Cocainae hydrochloridi.....grs. 5

Sol. adrenalin, 1-1000.....dr. 1

Aquae destillatae.....ozs. 2

M. Ft solut. Sig.: Five drops in eyes every three hours.

When the cornea, even at its periphery, is attacked, it is advisable to put the ciliary body at rest at once by the use of a mydriatic, preferably atropine. The yellow mercuric oxide ointment, gr. 1 to drs. 2 of petrolatum, introduced into the eye at night, causes rapid absorption of the phlyctenulae. It should not be used in the earlier part of the disease when the corneal lesion has reached the deeper layers, or when the eye is easily irritated. It does most good after the apex of the phlyctenulae has ulcerated. Dark glasses should always be worn, on account of the photophobia.

After the disease has passed the acute stage, insufflations of calomel or iodoform

If medical men refuse to prescribe remedies the composition of which is unknown the nostrum evil will be at an end.—*Med. Record.*

They are often far more interested in the discovery and study of the bacillus than in the study of the patient.—*Speier, Wis. Med. Rec.*

into the ulcer act very beneficially in the majority of cases.

In corneal cases, where there is but little conjunctival swelling or discharge, a bandage is very grateful to the patient, as it prevents attrition of the lid.

Ethyl-morphine hydrochloride (dionin) solutions, four per cent to fifteen per cent, are of some benefit in aiding in the disappearance of the resulting scar. In some cases it has been found necessary to cauterize the ulcer with electrocautery, or tincture of iodine, or carbolic acid, when the resulting scar is apt to be quite opaque. Hot or cold compresses are very useful, the latter being most useful in the early stages of the corneal disease, while the former aid in the absorption of the lymphatic or phlyctenular masses.

In the treatment of eczema of the lids and cheek, the following prescription has been found of most value:

Acidi borici.....grs. 15

Petrolati.....drs. 4 to oz. 1

M. Ft. Ung. Sig.: Apply freely.

Dusting the sores with finely powdered calomel at times acts like a specific.

THE DANGER OF REPEATING PRESCRIPTIONS.

The danger which may result from repeating a prescription without the physician's distinct order, was well illustrated by a case recently presented by Dr. Ignatz Weiss to the Clinical Society of Vienna (*Lancet*, June 23, 1906). The man complained of cardiac uneasiness, and presented the typical grayish-blue line on his gums so generally seen in cases of lead poisoning. The man had never worked with lead, but six weeks previously he had had an attack of pulmonary hemorrhage. The doctor prescribed acetate of lead in doses

or gr. 1-2 three times a day. The hemorrhage had soon stopped, but the man kept on taking the medicine continuously all the time (refilling through an accommodating druggist) simply as a prophylactic. He had taken in all about 62 grains of the acetate of lead and this quantity was sufficient to produce the symptoms of lead poisoning. The treatment of the case consisted in the immediate discontinuance of the lead acetate, of course, and in the administration of sulphur and iodine internally to aid in the elimination of the lead from the system.

The treatment of the real cause is to see to it that your prescriptions are not refilled without your order, or, in case you cannot control your practice and protect your patients this way, it is your bounden duty to dispense (and therefore control) your medicines yourself.

ECZEMA AS A CAUSE OF DEATH IN CHILDREN.

Dr. J. Bernheim-Karrer, of Zurich, reports (*Jahrb. fuer Kinderheilkunde*): the case of a child, age 5 years, which at the age of 4 months was brought to him for a scaly, dry scalp eczema, but moist on the forehead. Arsenic had no effect. Diet likewise. It would improve for a time, then the skin would again crack and the serous ooze would result in crust formation again. It began to spread to the right side. Impetigo pustules were now observed. The child seemed apathetic. Tongue coated. The cervical glands on the right side were enlarged. At the age of 11 months the fontanelle was still open. The child also had no teeth at this age. Albumin was found in the urine. The doctor prescribed an ointment and told the mother to return with the child in two

* Sayre has investigated gelsemium and finds that the roots lose strength in drying, about one-fifth.—*West. Druggist*,

Eastern druggists consider attacks on acetanilid advertisements in the interest of the phenacetin company.—*West. Druggist*,

days. He was advised on this day that the child had died during the night. The dissolution was rapid. The child had scratched itself very much, as the itching was fearful. The face was besmeared with blood, and under the skin pus was observed. The ointment he had prescribed was:

Ichthyol	0.2
Zinci oxidi.....	2.0
Emplast. diachylon.	5.0
Vaselin flavi	5.0
Lanolini	10.0

The nourishment in the form of milk was not retained. The child became more and more stupid, but never lost consciousness. Bowels moved freely and with regularity. At night of the last day an enema was given, but without result. It went to sleep at about 11 p. m., and at 6 p. m. was found dead, although still warm. There was no spasm of the larynx and no symptom of tetanus. The autopsy showed a general purulent condition under the skin and many small cysts of the skin. The pus was loaded with diplococci, also the cerebrospinal fluid showed diplococci. [We do not think it is quite correct to consider the eczema as the *cause* of death in this case. The eczema was apparently one of the expressions of a marasmic condition; the solution of the continuity of the skin, due to the violent scratching, gave admission to various pathogenic organisms which eventually caused the little patient's death. But the eczema cannot be considered the real cause.—W. J. R.]

A CASE OF COMPLETE REFLEX ANURIA.

That complete anuria may result from purely nervous causes seems to be demonstrated by a case reported by Dr. F. Zuc-

Hardison has used veratrum in confirmed cases of epilepsy with most excellent and satisfactory results.—*South. Pract.*

cala (*Med. Blætter*). The patient was a man of 38, in whose family three deaths and one severe illness had occurred at the same time. He became very depressed, generally weak, and had been suffering with complete anuria for four days when the doctor saw him. The catheter showed absence of urine in the bladder. In spite of treatment no urine appeared during the following three days, but the patient had some movements from the bowels. He soon developed symptoms of uremic infection, cardiac depression, edema, swelling of the abdomen, vomiting, general apathy, etc. Under infusions of saline solution during the following two days the symptoms improved. The patient began to pass abundant urine and on the eleventh day of the disease he was convalescent. Though the urine analysis pointed to an acute nephritis, still by exclusion, the author considers the psychic shock as the sole cause of the trouble. As is well-known, severe nervous shock may cause paralysis of the vasomotors and as a consequence thereof, a lowering of arterial pressure with a cessation of urinary secretion.

THE COEXISTENCE OF SYPHILIS AND PULMONARY TUBERCULOSIS.

Too little attention is paid to the coexistence of syphilis and tuberculosis. During the last two years, Dr. John H. Pryor, of Buffalo, (*Med. Record*, vol. 70, no. 3) observed fifteen cases of syphilitic disease, associated with pulmonary tuberculosis; all the fifteen cases gave a complete history of syphilis and the diagnosis of tuberculosis was verified by the finding of tubercle bacilli in each case. How important it is to bear in mind the possibility of the coexistence of the two diseases is seen from the

Cicutine has the same indications and is used for the same purposes as the bromide of potash.—Shaller, *N. E. Alkaloidist*.

fact that the infiltration and ulceration of the larynx, pharynx, soft palate, nasal cavity, etc., were considered by other physicians as tubercular, when in reality they proved to be specific and promptly responded to the therapeutic test—potassium iodide. In one case a gumma of the neck had been followed by deep ulceration, which had existed for three weeks. It had been pronounced a carbuncle and later ascribed to tuberculosis. This case also promptly responded to specific treatment.

In conclusion the author calls attention to the following propositions:

Pulmonary tuberculosis is often held responsible for too many manifestations of disease which are due to other causes.

The fact that a patient has tuberculosis should not be an excuse for disregarding these conditions, which often have a decided influence upon the prognosis and cause much avoidable discomfort.

Syphilis is a common disease, and physical debility combined with worry and mental distress, which may accompany tuberculosis, may arouse a latent syphilitic taint.

The association of the two morbid conditions may be disguised and the symptoms confused.

Furthermore, many of the manifestations of syphilis are quite similar to these produced by tuberculosis.

The diagnosis of syphilis, in connection with tuberculosis, will require close scrutiny, and often the therapeutic test.

Persistent fever above 99.5° F. in incipient cases of tuberculosis, when the lesion is slight and the general condition not much impaired, and when rest with proper treatment for a period of three or more weeks fails to secure an amelioration, should be viewed with suspicion and the possibility of associated syphilis thoughtfully considered. This is also true when a typical

pneumonia or intractable subacute bronchitis supervenes.

The improvement in the tuberculosis case following antisyphilitic treatment is most marked, and at times surprising. This is particularly noticeable in reference to the prompt and decided drop in temperature.

THE CONTAGIOUSNESS OF GUMMA.

The general opinion has prevailed and is still prevailing, that the tertiary lesions of syphilis are not contagious. More careful data, however, seem to demonstrate that such opinion is incorrect and that gummata are unquestionably infectious. Dr. Charles M. Williams, of New York (*Med. Record*), reviews the entire subject, reproduces reports of 41 cases previously reported by other physicians, which show that syphilis may follow from infection by gumma. He refers to the experimental data recently reported by Finger and Neisser and concludes as follows:

These cases are now sufficiently numerous and reported in sufficient detail, I think, to bring conviction even to a careful mind; but they do not amount to proof. The experiments, on the other hand, are conclusive. They rest on the authority of well known and reliable observers, one of whom was forced by them to give up the opinions he had held and defended for years. They prove that a gumma may be capable of transmitting the disease. Whether a gumma is always contagious is a very different question. It is altogether probable that the living, growing part, the border, is always infectious, and that the rarity of examples of infection is due to the fact that the organism is present in such scanty numbers and has so little chance to reach fertile soil. In any case, the practical lesson is the same

Ipecac is only of value as it contains emetine in greater or less quantity. In children it is almost indispensable.—Johnson, *N. E. Alk.*

Nine-tenths of the calcium sulphide on the market is inert. Only with a reliable article did I learn its real value.—Browne, *N. E. Alk.*

—so long as a man shows any sign of syphilis, so long he must be considered a source of danger to the community.

TREPONEMA PALLIDUM AND DR. SCHAUDINN.

Hardly have we become used to the pronunciation of the name of the alleged specific bacillus than we are told that this name is not quite correct; that the correct designation is or should be *Treponema pallidum*. Isn't that too bad?

In this connection it is of melancholy interest to record the untimely death of the discoverer of the *Spirochaeta pallida*. Dr. Schaudinn was only 36 years old and a typical Teuton. Tall, blonde, with a blonde beard, broad shouldered and splendidly built, he gave the impression of being in perfect health. It is some fifteen months ago that the writer met him, at the meeting of the Berlin Medical Society, when he read his epoch-making paper on the discovery of the *Spirochaeta*. Great things seemed to be in store for the young scientist. Certainly nobody in that over-crowded room thought that in such a short time, grim, unreasoning death would call Schaudinn to the country whence no one returns.

A FAMILY INFECTED WITH SYPHILIS.

The dangerously infective character of syphilis need not be emphasized; but every once in a while a particularly atrocious case comes to our notice, in which an entire family or household is innocently infected and misery is brought on several people merely on account of ignorance of the nature of the disease and of its terrible dangers. As to inherited syphilis, even the medical profession is not fully informed as to its dangers, for the opinion seems to prevail that the chances of infection from inherited syphilis

are but slight. This is not so. And the following case, reported by Dr. W. R. Grove (*Brit. Med. Jour.* June 16, 1906) is full of significance. The case is as follows

In July, 1904, a girl, who had contracted syphilis two years before and had had but a few months' treatment, gave birth to an illegitimate female child, which developed universal pemphigus a few days after birth, but recovered. The girl returned to service, leaving the child to the care of her mother, who understood the disease and its contagiousness. Mercurial treatment was not continued more than about six months. In December, 1905, the child had some trouble around the anus and a sore mouth, but it did not come under treatment until January 11, when condylomata were found around the anus and some stomatitis; there were no cracks around the mouth and the tonsils appeared clear. At the end of January the grandmother came under treatment for an indurated sore on the right side of the lower lip, a sloughing ulcer on the right tonsil, a mass of hard glands beneath the jaw, and bad stomatitis. The sore on the lip had begun about a fortnight before, and she was certain the sore-throat had begun at the same time, perhaps before. Within ten days all doubt as to diagnosis was set at rest by the appearance of a universal copper-colored rash inclined to scale. Upon this a daughter, aged twelve, was brought up with a sore throat, which had continued for three weeks without improvement. On the left tonsil was an extensive ulcer with irregular edges, part of it covered with a wash-leather-like slough, with a mass of glands beneath the sterno-mastoid. Within a few days she developed a rash, in color and extent exactly like her mother's. There was no other external sore.

When the girl's rash developed, a younger brother, aged seven, was sent up with a

Measles: To prevent fermentation during fever I have learned to depend on the sulphocarbolates of zinc, lime and soda.—Sanborn, *N. E. Alk.*

In old men with hemorrhoids make a rectal examination and see if there is not also as a cause, enlarged prostate.—*Med. Standard.*

similar sore mouth on the right side. In him also a rash developed at the end of February, but of much smaller extent, almost entirely confined to the chest and back in a few isolated patches. Except the tonsil, there was no other sore.

The baby had been lately fed with a spoon, and, after the customary manner of primitive nurses, the food had first been tasted. Both the grandmother and girl had fed the child this way; the boy had not, but there is the possibility that he used the spoon unwashed.

Each of these patients seemed to have primary sores on the tonsil—an unusual situation—the grandmother having also a coexisting one on the lip.

The point especially to be emphasized is the age of the child—nearly 18 months—when she infected others, and therefore the necessity for lengthened treatment in these children and increased watchfulness for the sake of others.

A CASE OF INTRANASAL CHANCRE SIMULATING NASAL DIPHTHERIA.

While tertiary lesions of the nose are very frequent, intranasal primary lesions (i. e. chancres) are so rare, that the following case, reported by Dr. J. D. Rolleston (*Lancet*, No. 4320) cannot fail to be of interest.

A married man, aged 28, was admitted to hospital, certified to be suffering from nasal diphtheria. On the medical certificate it was stated that diphtheria bacilli had been found in the culture. There was a previous history of diphtheria fourteen years ago. For the last month his nose had been sore, but it was not until it began to swell that he sought medical advice. On admission, the lower two-thirds of the organ presented a most unsightly appearance, being considerably swollen, and of a dusky-red color. The right ala nasi, which was thickened and very

tender, was lined on its inner surface by a membranous deposit from which, on pressure, a sanious discharge exuded. The left submaxillary and sterno-mastoid glands were considerably swollen and slightly tender. The buccal mucosa and fauces were normal. On the chest and abdomen a polymorphous eruption was present, which, from the absence of pruritus, had hitherto escaped his attention. The temperature on admission was 99.2° F. but became normal the same evening and remained so till his discharge. A smear preparation and three successive cultures of the nasal membrane showed no diphtheria bacilli. A similar examination of the throat was also negative. The headache and partial impediment to respiration caused him to pass a restless night. The following morning there was no improvement. Though no history of direct or mediate exposure to venereal infection could be obtained, the adenopathy and polymorphic eruption suggested the diagnosis of intranasal chancre. Mercury with chalk (gr. 2, three times a day) were therefore administered and the nostril was swabbed frequently with black wash. The beneficial effects soon became apparent. Three days after admission, the nose, though still tender, was less swollen and red and showed a branny desquamation over the inflamed area. The headache had gone. The voice, hitherto nasal, soon became clear. The deposit within the nostril now consisted of dried-up crusts which gradually separated, revealing beneath a slightly raised granular swelling which resembled in its appearance and induration the primary lesion found in more usual situations. In the course of the next ten days the outer surface of the nose gradually regained its normal appearance and the intranasal swelling diminished in size. The glandular affection subsided more slowly but soon lost its tenderness. Beyond

Mays, speaking of phthisis, says the evidence of the deadly effects of the fly hardly admits questioning.—*Med. Standard*.

A man vat marries a second dime don'd deserve to haf lost his virst vife.—*Medical Standard's* German correspondent.

slight epistaxis, which followed blowing the nose, nothing further of note occurred and the patient was discharged two weeks after admission.

A CASE OF WARTS, WITH A MORAL.

Boy, eleven years old, has a lot of nasty warts on his right hand and forearm. He had them for several years and they have been increasing lately both in size and in number. The largest ones had been cut away, but they return. In fact any manipulation irritates them. The writer who was consulted advised leaving the warts locally alone for a while and prescribed twenty grains of calcined magnesia four times a day. He has read recently in the French journals of the good effects of magnesia (and lime warts) and decides to give it a trial. The prescription is taken to the drug-store, but, as the boy leaves for the country that day, the medicine is forgotten. Two weeks after the boy left for the country, not a trace of the warts is left. The warts that had been cut show a slight cicatrix. Of the others there is not the slightest mark to identify their former seat. Now had the medicine not been forgotten, had a few powders been taken and the warts disappeared, the writer would surely have come out with an article on the wonderful effects of magnesium oxide on warts and another *post hoc propter hoc* mistake would have been added to the already too large collection in the possession of medicine.

Do not draw conclusions from one case, no matter how intimate the connection between cause and effect may seem to be.

TREATMENT OF GONORRHEAL ARTHRITIS.

Gonorrheal arthritis or rheumatism is frequently so baffling, so exasperatingly

obstinate, that every case that is apparently perfectly cured should be reported. I wish to refer here briefly to two cases. I may report them in detail at some future time.

The two patients had gone the rounds of several prominent physicians, but they didn't even obtain relief. One patient, a man, has had the disease for about a year; the other patient, a woman, infected by her husband, had had it for about two years. I gave them several remedies with very little relief. Finally I prescribed the following: I gave each patient calcium sulphide, two grains every hour, and ordered them to rub the gonorrheal joints thoroughly with collargol ointment (Unguentum Credé). They became saturated with the calcium sulphide, so that the breath smelled very decidedly of H_2S . They used each about a dozen boxes of ointment—but results: Both patients are completely cured, at least apparently so. Whether they will have a recurrence remains to be seen but they are satisfied. To which drug is the credit due? The scientific method would have been to give first one drug and then the other. But have we a right to experiment on private patients in order to determine the efficacy of a drug? No, the writer confesses he is not a Skoda, nor a Rokitsansky, and he is more interested in the actual cure of his patients, than in the advancement of scientific medicine—at his patient's expense.

THE RELATION OF GENERAL HEALTH AND LOCAL CONDITIONS.

It has been pointed out many times that he can only hope to be a successful specialist, who had been before a successful general practitioner. He who jumps into a specialty immediately on leaving college may acquire great proficiency in his branch, but there will always be a certain number

Ought to be impossible to find a doctor who thinks a badly congested or degenerated kidney can be relieved by stimulating.—*Med. Standard*

Bitter substances in the stomach have been found to increase the number of leucocytes in the blood.—*J. A. M. A.*

of cases that will baffle him. He necessarily acquires a narrow horizon, fails to bear in mind the ultimate relationship between all the organs of the body and that an "injury to one is the concern of all." To illustrate the great interdependence between local conditions and the general health, it is well to refer to certain cases of metritis; of local conditions, one would think this was a local disease par excellence. And still we have seen numerous run-down cases, which were treated for months and months by injections, irrigations, instillations, sounds, dilators, massage, etc., etc., and which in spite of everything refused to get well. A cessation of the local treatments, with some tonic medicine, nourishing diet (which would occasionally, strange to say, include some wine with meals) and cold effusions and sitz-baths would result in a speedy cure! Which again goes to confirm the truth of the over hackneyed expression, that in each case we should treat not only the disease but the patient as well. Still this admonition is frequently forgotten, hence the above editorial.

GONORRHEA IN AN INFANT AGED TEN MONTHS; GONOCOCCIC INFLAMMATION OF THE SCALP.

At the meeting of the Société de Pédiatrie of Paris, on May 15th, M. Apert and M. Froget (*Lancet*, July 14, 1906) reported the case of a male infant, aged ten months, who was suffering from urethritis which was accompanied by a large swelling of the whole of the posterior hemisphere of the cranium. After 48 hours, the redness and induration were limited to peripheral patches resembling those of erythema nodosum, while at the center of the swelling was a white and soft edema which quickly disappeared. Two small papules formed on one of the patches

and became transformed into pustules. The pus which they contained showed polynuclear cells and masses of gonococci, as did also the discharge from the urethra. The origin of the gonorrhea could not be ascertained. Inflammation of the scalp is a very rare complication of gonorrhea. The rapid and almost complete resolution of the inflammation of the cellular tissue is noteworthy and the condition is analogous to the gonococcic peritonitis of little girls, the onset of which is marked by great acuteness and is rapidly followed by complete resolution. Though the gonococcus is very tenacious on mucous surfaces, its vitality in the cellular tissue is brief.

A TEST FOR ACETONE IN THE URINE.

Dr. Frommer recommends the following test as convenient and easy of execution. The reagents are potassium hydroxide and a ten per cent alcoholic solution of salicylic aldehyde (one part salicylic acid, ten parts of absolute alcohol). About ten Cc's of urine are put in a test-tube and one gram of solid potassium hydroxide is added; before the latter is dissolved, ten to twelve drops of the solution of salicylic aldehyde is added and the solution is heated to about 70°C. In the presence of acetone there is formed a scarlet red ring. According to the author, even the minutest amount of acetone will give this reaction and no other constituent of the urine will give a similar color—not even diacetic acid. The reaction is explained as follows: One molecule of salicylic aldehyde combines with one molecule of acetone to form oxybenzol-acetone. This, in the presence of strong alkalies, forms dioxy-dibenzol-acetone. The alkaline salts of this compound are intensely red.

The leucocytes are concerned in the transportation of a part of the digestive proteids into the circulation.—Hoffmeister.

Thirty infected flies may deposit within three days from 6,000,000 to 10,000,000 tubercle bacilli.—Lord!

GLEANINGS FROM FOREIGN FIELDS

Translated by E. M. Epstein, M. D.

ARBUTIN IN PYURIA.

PYURIA," says Dr. F. Cathelin, chief of the Necker Hospital Clinic, Paris, "is one of the most frequent syndromes in urinary affections, and it is therefore useful in practice to be able to trace the suppuration to any one portion of the urinary apparatus, since the treatment differs according to the parts concerned."

The pus may come from the canal, or the adjoining glands of the bladder, or from higher organs—kidneys and ureters. We shall not refer here to pus coming from the urinary canal (urethra) to which arbutin does not appertain, as it does to cases of pyuria, and we shall examine the cases of pus coming from the bladder or from higher up.

1. The pus coming from the bladder there is a case of cystitis. Here, whatever be the cause of the cystitis, the triple symptoms will appear in most cases, of pain, purulence, and urgent frequency of urination, which may rise to incontinence.

We may have a cystitis from catheterizing a patient for the first time in his life, or when catheterizing in an impending sickness, or a woman in parturition.

In infection by catheter, sound or bougie, we have infectious cystitis, postblenorrhagic, which may rise to hematuria. In a woman with a rebellious chronic cystitis which first set in in consequence of a specific vaginitis the case may assume a still more alarming character.

In these cases the bladder should be washed out with a silver nitrate solution of one to a thousand if the bladder is yet of

good capacity (100 to 150 grams, 25 to 37 1-2 drams), or when the capacity is small then inject a solution of from one to five per cent.

Large lavages with permanganate, or with mercury oxycyanide, will also give success. In this class belong contraction of the bladder, in which Cathelin recommends the methodic administration of arbutin.

Most frequent are the spontaneous suppurations of the bladder which have tuberculosis as their usual cause. A study of the patient's family and personal antecedents, which are of prime etiologic importance, then his appearance, the chronicity of the affection, the prostatovesical and the orchiepididymic lesion, all these will frequently settle the etiology by their presence. These cases of cystitis are very long in getting well.

Pyuria of vesicular origin may have for its cause an exogenous foreign body, such as a hairpin, a piece of catheter or bougie, around which there may develop a phosphatic deposit forming there a uric-acid, phosphatic or oxalic calculus. These cases are surgical.

"Lastly we mention those prostatic patients who suffer from complete or incomplete retention, all or most of whom catheterize themselves and are infected. These patients who have retention of urine may get up a fermentation rising to putridity in that marvelous hot bag (*etuve*) at the constant temperature which is that of the bladder. There exists a vesical shallow (*bas-fond*) in those patients, where the pus is deposited and where phosphatic concretions are formed,

At the present day many of these patients are relieved by prostatectomy, which by removing the obstruction at the neck of the bladder allows its muscle to recuperate its temporarily lost power of emptying it.

"Apart from all these causes of vesical suppuration, which may be called primitive, there are also secondary causes where the infection is propagated from the kidneys to the bladder by the way of the ureter; seeming to prove a confluence of lesions around the opening of the ureter and in the opening itself. In this case the cystitis reveals a renal affection to which Bazy refers so frequently as showing tuberculosis to be the almost exclusive cause of the suppuration."

But even if the case be that of tuberculosis the antiseptic indication of arbutin remains in full demand.

"The character of the vesical pus is flocculent and miscible with all the urine when the vessel containing it is agitated; it is grayish white, cloudy and floats, appearing like a tampon of absorbent cotton much divided. In cases of severe infection in aged prostatic patients the character of the pus approaches that from the kidney, to which cases we shall refer again.

"There may also be a case where pus is in the urine without there being any cystitis or a renal affection,—yet the patient may pass a great quantity of pus. Here a cystoscopy is imperatively demanded, which may be done either with a German apparatus by means of water and prism, or with Cathelin's cystoscope of direct vision. Then there may be discovered an orifice communicating with a neighboring pocket, out of which the pus bubbles up as from a crater. Here we have to do with a neighboring abscess which opened into the bladder secondarily; it may be an appendicular abscess, or more frequently one of the uterine adnexa. Guyon calls special attention to this remarkable

tolerance of the bladder which may remain immune for years while it receives floods of pus from its vicinity. Cases of this kind are very rare, and yet the practitioner will have at least to think of their possibility in cases where the diagnosis is difficult. In such cases arbutin will be most useful in neutralizing the urine and so aiding the bladder in resisting its infection indefinitely.

"The infection may require surgical interference, it may be ascending by the way of the ureter, and be as it nearly always is, unilateral. In this case we have to deal with an old cystitis and a forced valvule, 'that ureteral guard,' be it from a common cystitis, or one from an old prostatic infection." [The following from White and Martin's *Genito-urinary and Venereal Diseases*, 6th ed. p. 505, may help the reader to understand better what the author means by that "forced valvule": "The muscles of the ureter are continuous with those of the bladder. Testut describes a valve-like arrangement due to the absence of muscular tissue in the upper wall of the terminal extremity of the ureter. This portion of the wall is made up entirely of a fold of mucous membrane; intravesical tension at once presses this wave-like fold against the low ureteral wall, and thus effectually blocks the tube." TRANSLATOR.]

Again we have to deal with a suppuration of sanguinous origin requiring medical treatment, an infection which is descending, traveling with the circulation and at first never affecting more than one kidney. And here we have a case of tuberculosis of the kidney, which is said at the present day to be a surgical disease.

Finally we may have a local suppuration, supervening renal calculus, which a radiographic examination may show us, or we may have before us a hydronephrosis and some pathological mechanism explaining the retention, such as valvules, kinks (con-

Last year's yellow fever cost Mississippi \$43,220.28, for 837 cases with 61 deaths. Pretty costly experience.

Nothing so surely kills effort than the assertion that a cure of usually fatal disease shows mistaken diagnosis.

dures), incarcerated calculus, abnormal vessels, etc.

(To be continued.)

MESSAGE APHORISMS.

Docent Dr. Bum spoke about Massage to the College of Physicians at Vienna, Austria, at their session of Jan. 29, 1906. His words will do us good if we take them to heart as we ought.

Scientifically, he said, massage is little attended to, but practically much more. This surgery of the unarmed hand is far behind operative surgery. And no wonder, for "anybody can massage," and if not, then we have all sorts of "vibrators," and any quantity of lay people ready to help you. The speaker spent a lifetime in putting his method of massage on a scientific basis, to thus rescue it from the hands of charlatans and pretenders. Massage in its numerous indications and applications requires not only practised technical skill but the service of a physician, in the highest sense of the word, in order to meet the demands of science and practice. And the exercise of it is accessible to every physician, who has accustomed himself to the palpation of bodily tissues.

The speaker understands by massage therapeutic palpation, which gives the practitioner information concerning the tone and position of tissues and organs. The speaker illustrated what he said with numerous instances from his practice in the diseases of the motor and digestive apparatus, in those of the prostate, in varicose chronic ulcers, and in surgical injuries. He spoke extensively of cardiac massage and his method of stimulating the cardiac muscle by properly massaging the precordial region, a practice with which Scandinavian physicians have been well acquainted for years and which

was thoroughly worked out by Heitler and others. In organic heart diseases the speaker advocated a combination of medicinal therapy with precordial massage which invariably resulted in strengthening the heart, reduction of the pulse rate, and the patient's general euphoria. In cardiac neuroses percussion acts as a heart stimulant of great benefit. At the same time he cautioned against any attempt of fat-reducing in corpulent cardiac, neurotic and aged patients beyond fifty years. It is not the reduction of ingested albumin that is needed, but the more expenditure of it by well directed muscular work.

The speaker called attention to the dangers from the wrong technical application of massage and where it is contraindicated, as is often done by the ignorant in the laity. He advocated the combination of massage with other physical therapeutic measures, such as gymnastics, thermotherapy and the like. The study and practice of these measures must protect the profession against the excesses of quackery.—*Wiener Med. Wochenschr.*, No. 7, 1906, p. 333.

CAUTION WITH PARAFFIN INJECTIONS!

Two cases of unfortunate results from this operation are reported by Uthoff of Breslau. One, a woman, had it injected near one of her eyes, and she became blind at once, the ophthalmoscope showing a filling up of the central artery.

Another case, that of a man, had it injected to correct a saddle-nose. Two months after the operation the eyelids became thick and hard so that they could not be moved, and the man was practically blind with eyes intact. Dr. Uthoff succeeded in removing the paraffin enough to allow a chink opening so that the man could just see. But the man would not permit any further attempts.

Many a doctor has allowed himself to be bluffed out of a valuable discovery by jealous pessimistic doubting.

The failure of surgery to cope with the majority of cancers should impel us to investigate other measures

A preventive of the last accident is, according to Dr. Muller of Vienna, Austria, to press hard with the finger by the side of the point where and when the injection is made, so as to prevent the mass penetrating the neighboring tissues. The general consent of the speakers of the assembly of German physicians and scientists at Meran, 1905, where the report was made, was that the eyelids were a "*noli me tangere*" for paraffin injections. (*W. M. W.* No. 7, 1906, p. 329).

SIDE EFFECT OF UROTROPIN.

Karowski saw a mild case of albuminuria after the use of urotropin. In medical literature are found sixteen reported cases of irritation of the urinary tract from urotropin. Of those thirteen cases were of hematuria, one case of hemoglobinuria, and three cases of albuminuria. The question readily suggests itself: Why only sixteen such cases in the thousands of cases where urotropin is used? Striking, too, is the preponderating number of acute infectious cases in those reported. It seems that the formaldehyde of urotropin splits off more readily the higher the temperature of the patient; and in the cases reported many were those of fever. It is conceivable that large quantities of formaldehyde became split off in the blood during the height of the fever. This is a mere surmise and cannot be urged as a theory.—(*Pharmac. C. H.*, No. 17, p. 343, 1906.)

PONTICIN.

This new glucoside was discovered by Gilson (*Repert. de Pharm.*, 1903, p. 413) in a bastard rhubarb derived from *Rheum rhaponticum* and *Rheum undulatum*, which is cultivated in Moravia, Austria. The separation of ponticin is made possible by the

fact that when it is extracted from the powdered rhubarb with acetone the resulting crystals are insoluble in water, absolute alcohol, methyl alcohol, acetone, acetic acid, ether, chloroform, benzine, and petroleum ether. It is soluble in a hot mixture of four parts water and six parts acetone, also in a solution of caustic potash and fluid ammonia. It melts about 447.4° F. The solution of ponticin in acetone colors dark blue with iron chloride. Boiling it in a five per cent solution of sulphuric acid, it decomposes into sugar and pontigenin. This last crystallizes out of glacial acetic acid and a mixture of water and methyl alcohol, in colorless crystals, which melt at 369.4° F. It is slightly soluble in hot water, and very soluble in methyl and ethyl alcohols, acetone, ether, acetic ether; but insoluble in benzine and petroleum ether.

Elementary analysis give the formula of it as $C_{15}H_{14}O_4$. The formula of ponticin is very likely $C_{21}H_{24}O_6$.

Tannoid rhubarb, such as Chinese, does not contain this variety.—(*Pharm. Centralh.*, 1906, p. 8. Comp. the same 44, 1903, 662.

Quinine formate forms, according to the *Sudd. Apoth.-Ztg.*, 1906, 153, silky, glossy, crystalline needles. They are permanently neutral, easily soluble in water, alcohol and chloroform, but insoluble in ether. The quinine content of it is 87.6 per cent. Used in hypodermic injections.—(*Ph. C. H.*, 1906, p. 258.)

Gum arabic and opium. Firbas came by his experiments to the conclusion that gum-arabic in solution, and in that condition only, changes some of the opium brought with it in contact into oxymorphone, which, when not in too small quantities, can be precipitated with potassium chromate.—(*C. H.*, 1906, p. 380.)

It is of paramount importance to attempt intestinal antiseptics in every case of hepatic insufficiency.—Croftan, *Med. Recorde.*

The border line between medicine and surgery? There is none. Each grabs everything in sight and howls for more.

MISCELLANEOUS ARTICLES

A PRACTICAL CURE FOR THE SUBSTITUTION EVIL.

THIS paper treats of the dangers of the substitution evil, its prevalence, and a practical remedy for it. Its dangers are those following the use of inferior medicines, which cost the substitutor less than the genuine. The substitutor always dispenses a cheaper and inferior article than that called for. A case in point illustrating this was that occurring not long ago in Chicago. It was shown that a large number of prescriptions calling for a certain powder had been filled with a substitute, costing but a fraction of the genuine, and inert. By this practice of substitution the doctor's reputation for skill is injured, because the results that would follow the honest filling of his prescription cannot follow when a cheap substitute is supplied. In serious cases, where potency in the drug is imperatively needed, the patient's life may be sacrificed for lack of the genuine stimulator, or depressor, that the skilled physician wrote for. The substitution evil, therefore, puts in jeopardy the life of the patient and the reputation of the doctor.

The prevalence of the evil I will not dwell upon. It is demonstrated by the efforts the manufacturing chemists are making to quell it all over the country. The practice is indeed a sad commentary upon the business morality of the country. I will not quote personal experiences with the evil—which were numerous—but will refer you to your own experiences. Fortunate are you if you can not recall many, and if the substitution evil is not rife in your community, the

community deserves gratulation for its Arcadian simplicity.

The remedy which I offer for this evil has no merit of originality. The necessity of my patients receiving the medicine I prescribed, led me to its use. A sure way, I found, was to supply the medicine personally. The remedy for the substitution evil therefore is—dispense your own medicines. In this era of improved pharmacy this is not a difficult task. Especially is this the case when the active principles of drugs are dispensed. All doctors are familiar to some extent with the active principles—for all use in their practice morphine, strychnine, and atropine. Comparatively few, however, are familiar with the wide therapy of the other active principles. To this perhaps can be attributed considerable of the indifferentism to drug efficacy manifested by so many in the profession today.

A good deal of it can also be laid to the account of our teachers. A decade or two ago we were taught the doctrines of the self-limitation of disease, and the uselessness of drugs (based upon the inefficacy of the old galenicals); the main thing, in the treatment of disease, was a masterful inactivity combined with a minute observation of the manifestations of the disease. By acute observation we might hit upon a new differentiation of signs and symptoms, warranting the naming of a new disease; and adding a new disease to humanity's afflictions was considered, and for that matter is still considered, no slight honor.

The modern therapist, however, is not a masked follower of Mrs. Eddy, and content to let Nature take her course. He treats and cures diphtheria; he treats typhoid with intestinal antiseptics; he treats and cures rheumatic fever with eliminants and correct diet; he aborts pneumonia, and treats it, if developed, so that crisis is rare and lysis the rule; all of which advancement results from a rational therapy based upon scientific investigation and empiric clinical observation.

A good deal of this advancement in therapy I believe, to be due to the French school of active-principle therapy. This school, under Burggraeve and others, devised the method of administering the potent active principles such as aconitine, atropine, strychnine, digitalin, veratrine, etc., etc., efficiently and safely.

The drug administered can be given until its physiologic effect is manifest, and the haphazard method of medication so generally followed with the galenical preparations holds no comparison with the dosimetric (or alkaloidal) method for safety and efficiency. In America, Waugh has done much, by his practice and writings, to educate the American practitioner to the possibilities of this modern method. There is no therapeutic nihilist among his followers, for their positive results preclude scepticism.

In my practice I have found the use of the active principles effective. They also lend themselves to easy dispensing by the practitioner. They take up little space. Containers in which to dispense them, such as manilla envelopes, wooden bottles and folding boxes, take up little space also, and are found very convenient for the purpose. The minutiae of dispensing are not the purport of this paper. Such will suggest itself to the careful practitioner.

In my own case, I can state that the prac-

tical medicine I have learned since dispensing my own remedies is far and away above the extra trouble involved. I only regret that I was not taught the method early in my professional life. I wish to impress every practitioner with the desirability of knowing his medicines practically; of using them scientifically, and of stopping, at once and for all time, the evils of substitution by supplying his patients with efficient drugs. A good workman needs good tools—a skilful physician must use accurate remedies to get results.

EDWARD A. TRACY.

Boston, Mass.

ALKALOIDS AGAINST GALENICALS.

Nearly a year ago I read your reply to Dr. Howes' article under the caption "Superiority of Liquid Medicines Over Alkaloids." With greater interest I read in the June, 1906, issue your "Reply to a Misleading Criticism," and at once decided to "butt in."

I said "at once," but it would be more correct to say after a resume of my eighteen years of scientific life, nine of which were devoted principally to chemistry and pharmacy and the last nine exclusively to the practice of medicine along alkaloidal lines.

My first impression of Dr. Howes' article was that he still believed in the mysteriousness of medicinal preparations and further believes that the majority of practitioners believe the same way.

This may not be the case, but my impression was such. My second impression was that the doctor was not going to wait until August and then simply skin off a small strip of bark around the alkaloidal tree and deaden it gradually but simply cut it down and kill it at once. He evidently was not conversant with the fact that for more than ten years this tree has been cut, whittled and

Cooke urges local anesthesia with sterile water injections for rectal surgery—simple, safe and effective.—*Memphis Med. Mo.*

Tuberculosis is unquestionably the dominant cause of the increasing death rate of the negro in this country.—*Matas.*

skinned on continuously, and yet it stands today greener, fresher and more thrifty than ever before. It is the kind from which axes and wedges, if driven too hard, forcibly rebound, sometimes striking the chopper on the head.

He says, "Experimentation has demonstrated that liquids are much more promptly absorbed than articles of a semi-fluid or more compact nature." This is a self-evident fact, but is it anything against the use of alkaloids? Isn't it a point in its favor? Then he claims that this is the first point of the superiority of liquids over alkaloids. Let us see if it is. The alkaloids are generally used as salts—sulphates, hydrobromides, hydrochlorides, etc., and are soluble in water and the fluids of the body. Haven't we a right to put them into solution? When we put them into solution we have neither "articles of a semi-fluid" nor "more compact nature," but a liquid with just what we want, how much we want and nothing more. Which is of the greater importance, prescribing the medicament wanted and needed, or the liquid that is most easily absorbed?

"The action of liquids are more gentle" (*is* would make it grammatically correct but even then it would not be scientifically correct). His own statement, "liquids are more promptly absorbed" contradicts this. A lethal dose in solution will kill quicker than the same dose not in solution. His reasoning on this point is so gentle that it is absolutely false.

"The constant dripping of water, drop by drop." Well this is not in favor of galenical prescribing as I have proved in the above paragraph—but could be safely used as synonymous with alkaloidal practice, for alkaloidists give the proper small dose, by dose, drop by drop, as it were, "constant dripping" until the result is obtained—the hardest substance worn away.

The prevention of tuberculosis may be well condensed into three words, viz: Publicity, organization, education.—Haase, *Memphis Med. Mo.*

He wisely states that the medicinal qualities must be differently extracted, and at different times, in order "to obtain the most reliable results." Why? Just for fun? No, to get the active principles. The per cent of alkaloids in plants depends upon many things, heat, moisture, sun, shade and age, etc., and the manufacturing pharmacists, not always, if ever, possessing these data cannot possibly make uniform preparations without assaying for each active ingredient contained. I just now looked at several makers' fluid extract henbane and all read something like this: "assayed, standard 0.1 per cent alkaloid." They didn't even state which alkaloid nor the total alkaloids. Which is it? Most doctors would understand it to mean hyoscyamine. But alkaloidal prescribers would not be satisfied with this; they would want to know how much of that one-tenth of one per cent alkaloid was hyoscyamine and how much was hyoscine, as they prescribe these two alkaloids discriminately. Without this knowledge it is impossible for doctors to prescribe uniform doses of fluid extracts or tinctures, although always prescribing the same make.

This proves conclusively that it is impossible for pharmacists to make uniform preparations without a full assay, and intelligent doctors will never blame them, Dr. Howes to the contrary notwithstanding.

The cumulative point the doctor climaxed by saying, "Many deaths could be properly charged to this mode of action in the alkaloids," the editor dynamited so completely that the fragments can never be found.

The doctor is either not well versed on this subject or neglected rereading his article for his reference to the hypodermic uses of alkaloids refutes everything else. He says: "There is no question that the hypodermic syringe has been a blessing to mankind. But where is the practitioner who would like

Just what does a man mean when he says he gave the patient gtt.s? Was it tripe or fiddle strings?

to treat his cases wholly with this instrument? Is it the syringe or the medicine that does the work? When does the practitioner use the hypodermic syringe? When he wants a definite result; when he wants an unmixed result and when he wants a quick result—simply that and nothing more. Hypodermic prescribing is accurate prescribing—the medicinal agent plus sterile water. The syringe is simply the medium. Alkaloidal prescribing is the same minus the syringe.

For what do we prescribe medicines? To get certain effects. These effects must be due to certain agents. They can hardly be due to dynamic force; nor to the mind of the prescriber; but a certain something and this something can be ascertained. If once ascertained is it not the thing to give and is it not the thing to do? When once we know that a certain agent gives a certain effect, does it not become our duty to give that certain agent whenever that said certain effect is wanted, provided it is obtainable? And is it not our duty to give it united with other agents if so obtainable?

Would we be wise, would we be doing our professional duty to give a patient iron ore in giving him an antidote for arsenic poisoning when the antidotal agent, ferric hydrate is obtainable? In recent years we have learned that calcium is antirheumatic. According to Dr. Howes it would be better to prescribe something that contains calcium the way nature's laboratory sent it forth—crabs for instance; you know they used to be a rheumatic remedy. Alkaloidal practitioners prefer to give the calcium in the form of carbonate and let the rest of the crab go. They want to know how much calcium they give. "Guess" is not in their vocabularies.

Oculists use atropine, physostigmine, cocaine, etc. Not one in the entire United States uses galenical preparations of belladonna, Calabar bean, coca, etc., in the eyes.

Memphis Medical Monthly makes a justified kick at the dues of \$9.00 for membership in county, state and A. M. A.

Why? Oculists want definite results at all times and have learned to get them from definite agents. It would be just as intelligent for them to use galenical preparations of variable and uncertain strengths in the eyes of their patients as for general practitioners to use them in the stomachs of their patients, when active agents can be obtained.

How an intelligent man in this progressive age, can argue in favor of a crude and uncertain therapy is beyond my comprehension.

H. W. SMITH.

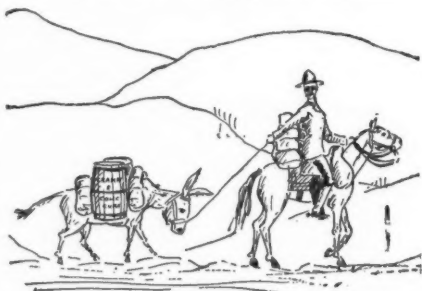
Kansas City, Kans.

—:o:—

We agree with Dr. Smith. How *can* intelligent men indorse uncertainty in this day, when *exact* knowledge is sought after.—ED.

THE NEW VS. THE OLD.

The accompanying sketches will show to you what a change the active principles have worked in my practice. Besides my private practice I have a contract to make one trip every week to two lumber camps, where all in all three to four hundred men are employed. This takes me three days and a horseback ride of seventy-five miles, but as it is up in the Rocky Mountains, close to—in fact crossing the Continental

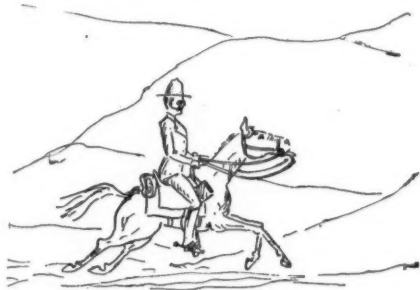


The Mountain Doctor's Traveling (?) Pharmacy—As It Used to Be.

Divide, I enjoy the scenery, and at present the flowers with which some of the gulches

In all cases of depression from whatever cause recollect that heat is the best of all stimulants.—Wherrell, *Med. Arena*.

are literally covered. Now before I discovered your little granules I had to pull around a great deal of stuff. And once



The Alkaloidal Doctor in the Mountains.

when the cook in the camp had used a copper kettle, which not only was unclean but full of verdigris, the whole camp got the bel—I mean abdominal pains. Well everyone of the three hundred and sixty-four men had to have one-fourth pound subnitrate of bismuth and four ounces cramp and colic cure. So you can figure out the amount of drugs dispensed by me. I just thought what they would have charged for it at Dyche's drugstore, State and Randolph, above which I used to have my office in



The Doctor and "Grandma" Giving "Dope" to the Kid.

1892. Should another such accident happen—why all I would do would be to give each man one granule of "anodyne for

Magruder reports ten cases of exophthalmic goiter treated with sulphuric acid with prompt and lasting benefit.—*Md. M. J.*

infants" and all would be well in less time than it takes to tell it.

And then the great change in the difficult act of gaining your patients' confidence and good will. Formerly, with grandma holding the struggling kid, I had to pour in the vile stuff,—“He acts so much better when you give it, Doctor,” and whenever and wherever I would meet him afterwards he would have some very important engagement somewhere else. I never liked this, for I am naturally very fond of children—have four myself ranging from 7 to 20.

But now, with grandma a smiling and a wondering, the kid meets me half way and



The Alkaloidal Way—No “Dope;” No “Struggling Kid.”

grins in pleasant anticipation. No more tears, no more kicks, no more hiding from the doctor.

Well I hope these tales have not bothered you, but have caused some contraction of the *musculi risorii*. One thing I am certain of, the little pills have a life-long friend in

TORNGY ANDERSON.

Saratoga, Wyo.

DIOSCOREIN.

Give dioscorein a good trial in your next case of dysmenorrhea, appendicitis, or, in fact, any painful condition in the abdomen.

Orloffsky says barium does not stimulate the heart but paralyzes it, strongly contracting the vessels however.

Give to effect and then stop, and you will not be disappointed. I have used it in many cases and it has yet to disappoint me.

M. B. STINE.

Crooks, S. D.

HOW ALKALOIDS ARE PREPARED.

As JOURNAL readers are always interested in the alkaloids, it may be of no small interest to them to know the process by which most of them may be obtained from the drug, together with the apparatus needed for the work.

The drug is thoroughly dried, then pulverized in a mill, or, if the quantity is small, in a mortar, and the powder moistened with about 75 per cent alcohol till it is all moist, but not so much so as to make it sticky; next, it is loosely packed in a percolater, first putting a small pledget of cotton in the bottom of the percolator, and stopping the outlet with a cork or rubber tube over outlet, and long enough to rise to the top of the percolater. After packing the moistened powder, the alcoholic solution is added till the powder is saturated and covered with an inch or two of the liquid. It is then left to macerate for a day or two.

After standing the above length of time, the cork is loosened, or the tube is lowered and clamped so it will permit the passage of about thirty drops per minute. More of the alcohol is added as needed till the drug is exhausted of its active principle, known by tasting on tongue from end of fingers till the bitterness disappears, or the solution does not give a cloudiness with Mayer's solution. After the drug has been exhausted, the fluid, or percolate, is evaporated until the alcohol is driven off. This may be done in an open dish, or in a retort, when the alcohol may be recovered through a condenser and used again. In either

case a water bath must be used and great caution taken not to ignite the alcohol.

After getting rid of the alcohol, water is added to the residue till it will easily filter; the filtrate is made decidedly acid with dilute sulphuric acid and warmed to 40° or 50° C., placed in a separatory funnel, and an equal amount of petroleum ether added, gently shaking the apparatus for about thirty minutes, and letting it stand till the liquids have completely separated. The lower liquid is drawn off in any convenient dish, and the petroleum ether into an evaporating dish. The liquid is returned to the separator and the process repeated with the petroleum ether three or four times. The petroleum ether portions are combined and evaporated over a water or steam bath to avoid setting fire to the ether.

From the petroleum ether we obtain either piperine, absinthin, capsicin, or salicylic acid. The acidulated liquid is again warmed and put in the separator and an equal amount of benzol added and then it is shaken as before three or four times, the several portions of benzol evaporated together, from which we will have: berberine, caffeine, colchicine, caryophyllin, cascarrillin, cuicin, colocynthin, cubebin, daphnin, delphin, digitalin, elaterin, ericolin, eratiolin, populin, and quassin.

The acidulated liquid is returned to the separator and chloroform added, gently shaken three or four times, as before. This time the chloroform will be at the bottom of the separator after shaking and can be drawn off, leaving the aqueous liquid in funnel. The several portions of chloroform evaporated together leave us: geissospermine, narceine, papaverine, quebrachine, theobromine, benzoic acid, convallamarine, digitalein, helleborein, aesculin, physatin, picrotoxin, saponin, senegin, syringin.

All that we can attempt to do is to hold in check the pullulation of virulent and putrefactive bacteria.—Croftan, *Med. Record*.

Every alkaloid or its salt which is soluble in water is suitable for hypodermic injection.—Birchmore, *N. E. Med. Gaz.*

The aqueous liquid is now shaken with an equal amount of petroleum ether to remove chloroform and separated as before, returning the aqueous solution to the separator with an equal amount of petroleum ether and the solution made alkaline with ammonia, agitated and separated three or four times. The several portions of petroleum ether are evaporated together. We get from this: aniline, coniine, conhydrine, nicotine, papaverin, quinine, sparteine, trimethylamine.

The alkaline aqueous liquid is returned to the separator and agitated with benzol three or four times. On evaporation of the several portions of benzol, we will have atropine, aconitine, aspidospermine, brucine, codeine, delphinine, emetine, gelsemine, hyoscyamine, narcotine, pereirine, physostigmine, pilocarpine, quinidine, sabodilline, sabatrine, strychnine, thebaine, and veratrine.

Again the liquid is agitated with chloroform and separated three or four times. On the evaporation of the several portions of chloroform, we will have celandine, cinchonine, narceine, nupharine. The aqueous liquid is warmed to 60° C. and shaken with amylic alcohol three or four times and separated, and on evaporation of the several portions of amylic alcohol, we will have morphine, solanine, or salacin.

For this work one must have the stock solutions, as follows: Mayer's test solution, alcohol, petroleum ether, benzol, chloroform and amylic alcohol, and the following apparatus: A separatory funnel, costing \$2 to \$3; three or four evaporating dishes, costing 40 to 50 cents each; three or four beakers, costing 30 to 50 cents each; and percolator costing \$1.00 to \$2.00; also a water bath, \$1.00 or \$2.00, and a Bunsen burner, 50 cents, or, what is better, a water bath of home construction heated by steam

from an outside source. But even with the best apparatus it isn't easy.

A CASE OF ANGINA—AND CROUP.

I report a case of angina, not for publication, but to show the one thing needed. The man, a very strong specimen, age 60, a few teeth, a stranger to ailments, by trade a worker in socks, applied for treatment. Symptoms: A distressing uneasiness in the epigastric region, slowly and stealthily stealing up the sternum to its center. At the latter point, as he expressed it, it pressed as though 100 pounds were being sustained. A very decided dyspnea, unable to move. He would stop anywhere and gasp. Pulse seemed little influenced. I used the mercurous chloride and salines. I pushed the triple arsenates with nuclein. I threw in antiferments. Three weeks elapsed, and patient grew worse. I suspected aortic aneurism, but the heart sounds were normal. I had conjectured tumor, fissure, and most other things; in despair I turned to my friend, by whom I've been so much benefited, and I was at ease on diagnosis (angina). I simply added one granule (gr. 1-67) digitalin three times a day. The patient began to improve slowly. He is not well, but comparatively a new man. It has impressed me with your oft-repeated maxim—single drug therapeutics. What else could have been done, save, possibly, to give glonoin. This was contraindicated because there was little circulatory disturbance, skin warm and natural color. I believe the digitalin would have answered the needs of the case alone. I attribute the attack to improper mastication and poor assimilation—in other words, inanition.

I regret that calx iodata is not meeting with the approval of *all* doctors. It has been a charm in my hands. When I am

The patient's digestion in health is treacherous; to trust to it in sickness is sheer stupidity. Ergo, use the hypo.—Birchmore.

All inflammatory processes are caused by specific pathogenic microorganisms, but carcinoma is not parasitic.—Senn.

"stumped," I give calcidin. But the remedy is rarely given under proper indications. I was called in consultation. The physician was a young man and one in whom I am interested. Case was croup. In leaving for the home of the patient, news arrived, child dead. The doctor said he had given calx iodata faithfully, as I had many times advised, and demurred to the dependable confidence in the remedy. I suggested the possibility of diphtheria. He requested me to go and examine the remainder of the children. Diagnosis—diphtheria. Antitoxin used, throat cleaned, and children recovered.

Now, Doctor, I merely write to let you know that I appreciate the great work you are doing. You're right nine times out of ten when you back a claim for a drug. Our trouble is the nice application which you presupposed.

"CORRESPONDENT."

—, Ind.

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The doctor permits us to publish his letter as from "A Correspondent." The subject matter is of considerable interest and we feel sure that other members of the "family" will benefit by considering his experience. Calx iodata is rapidly winning its way even among the most conservative doctors. Every day we receive letters from practitioners who say that they have been convinced as to its potency almost against their will. Others have used it in desperation when their own child has lain sick, and the result has been a saving of a dear one and a firm convert to active-principle therapy.—Ed.

"FROM THE BOOK OF LIFE."

The following eloquent tribute to the departing members of our profession was read by our good friend, Dr. C. S. Cope of Ionia,

Not more than 25 per cent of carcinoma patients who apply for surgical aid are within reach of successful intervention.—Senn.

Michigan, at a late meeting of the county society.

When we, as physicians, entered the field of active practice, we pitched our tents on the edge of the "Valley of the Shadow of Death" and have been ever since in daily and hourly conflict with the great Captain of the destroyers of the lives of men. We bow in submission when a brother practitioner, yielding to the inevitable, falls beside us; but the battle ceases not, and the warfare goes on apace. The places of our fallen comrades are taken by the new men; those who have been long in preparation, coming up out of the severest discipline, and after years spent in hard study and self sacrifice in order to obtain a degree, quietly they take their places on the firing line and begin action. Our admiration goes out to them as they silently deploy to their positions and commence those evolutions which, added to the mutation of coming years, will convert them into veterans; and to these we extend the glad hand of Frater.

It is fitting that we pause at this time, mute and silent; inaudibly crying, vale! vale! as the familiar forms of our departed confreres appear, and pass, for an instant distinctly silhouetted against a far off fading sky-line: "Crowned with silver and clothed in the purple robes of experience" they have crossed the highest ranges of the great continental divide of life. Joyfully they journey onward; together they descend the delightful declivities of the further side; with the benediction of the blessed sunshine falling on their faces.

YOUNG IN THE ALKALOIDS AND GROWING.

The undersigned would respectfully represent that, notwithstanding he is old in years, he is comparatively young in the use of the alkaloids. However, I am daily learning and carefully and cautiously increasing the number of alkaloids used. Remember I am 76 years old, have been practising medicine over fifty years, until four or five years ago subjected to all the annoyances and vexations

In 1901 Senn inoculated himself with a malignant carcinomatous graft, unsuccessfully. Less expensive material would be advisable.

growing out of the uncertain effects produced by the medicines used. I now use the alkaloids exclusively and I know if my diagnosis is correct, the right remedy properly and efficiently administered, in ninety-five per cent of cases the desired effect will be produced.

Now I will call attention to some of the alkaloids I am using.

First, aconitine, almost daily in the usual way, except I add one or two (and sometimes more) to adult dosage as well as in the case of children. Why not?

Second, intestinal antiseptics. With me they come in everywhere. Boys you can't very well use them amiss. Study their dosage and effects.

Third, calomel with aromatics, 1-10 grain each. I rarely ever use any other preparation of calomel and I get results all right.

Fourth, menthol compound. I call it my "Tyler to guard the loot." I use it as a mouth wash and gargle in all cases and rarely or never have fever blisters, fissured lips or sore mouths. Use it boys, strong and often.

Fifth, chlorodyne. I wish to call particular attention to this compound granule. Since learning the effects and adopting the use of chlorodyne I rarely ever find any use for anything else in diarrhea, congestion, etc. (I give glonoin to start the pendulum, follow with chlorodyne to keep it going). I now have little or no use for any other bowel remedy other than chlorodyne and intestinal antiseptics. I find little or no use for atropine. Boys study and use chlorodyne.

Well, this is all I can say this time, am doing the best I can under the circumstances. Alkaloidal practice is a living, growing reality, here to stay. So mote it be.

M. W. FRAZIER.

Carrizo Springs, Texas.

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Good, Doctor, so far as it goes; but give us

Trauma exercises a more important role in the causation of sarcoma than in that of carcinoma.—Senn.

more. With your half century of experience we are sure you can give us many a helpful hint. But "little or no use for atropine!" We can't understand that. Atropine we find one of the most useful remedies in our case. It is better for the relief of most forms of pains than morphine; our chief reliance in shock and hemorrhage; the remedy *par excellence* in all forms of spasm; the best respiratory stimulant! Really, we wouldn't know how to practise medicine without atropine,—or hyoscyamine.—ED.

THE ALKALOIDS, WHY NOT USE THEM?*

My purpose in reading this paper is to present some of the general principles governing a method of treatment usually called "alkaloidal medication," and I hope I can present them with sufficient clearness and force to be distinctly understood.

Several years ago, it is claimed, the eclectics endeavored to introduce the alkaloids and it is said that this almost ruined their school. This was due to the fact that at this time the chemists could not furnish them with active principles of such uniform strength as to render them safe, as they now are, neither were physicians sufficiently familiar with pathology, and the physiologic and therapeutic action of drugs.

The present movement toward the employment of the active principles is due to Dr. Burggraeve, a Belgian Professor of the University of Ghent. It has been estimated that more than one-fourth of the French have adopted this method.

The fundamental principle of Burggraeve's method is his theory of the vaso-motor nervous system in acute disease. With a chill we have a spasm of the cutaneous capillaries; in congestion just the opposite, a

*Read before the Clark County Medical Society, at Kahoka, Mo.

The cure of tuberculosis in its early stages is comparatively easy; later there is little hope.—Albert, *Med.* *Fortnightly*.

vasomotor paresis. To relax spasm he gives hyoscyamine or glonoin; to restore tonicity, strychnine or digitalin; to reduce fever and equalize the circulation, aconitine or veratrine.

Such men as Burggraeve, Castro, Waugh, Abbott and others have calculated the effects of these agents with a precision that cannot be obtained from the uncertain galenical preparations.

Professor Roberts Bartholow, at a meeting of the American Medical Association, at Cincinnati, in referring to the use of the alkaloids said that they offered the most certain means of any form of medication yet presented and that the minimum dosage and possibility of frequent repetition gave therapeutics a power over disease that it never had before. He epitomized his remarks as follows: "Certainty of physiological action, smallness of dose and frequency of repetition until the therapeutic or physiological results are obtained." No oculist would attempt to dilate the pupil with fluid extract of belladonna instead of atropine. No one would attempt to anesthetize a part with coca instead of cocaine. Who would think of using laudanum hypodermically instead of morphine to relieve pain? What doctor would attempt to break up a chill with three or four ounces of cinchona bark when thirty to sixty grains of quinine would do the work.

I will bring to your minds a few instances in which the active principles produce more precise effects than the galenicals:

Hyoscyamus is to a limited extent hypnotic, but very uncertain. It contains two alkaloids, hyoscyamine and hyoscine. Hyoscyamine causes wakefulness, flushing of the face, dilated pupils, dryness of the throat and mouth, and fulness of the cerebral vessels. Hyoscine is one of the most powerful hypnotics known.

Physostigma contains physostigmine and

Do we share in an eternal life, and does the connection become a matter of experience?—Ashmead, *Medical Fortnightly*.

calabarine. Physostigmine restores tonicity to the brain and muscular fibers, acts locally as an anesthetic, causes contraction of the intestinal muscular fibers by its action on the secretory cells, and increases the secretion of tears, sweat and mucus. Calabarine antagonizes physostigmine throughout its entire field of action, causing tetanizing action closely resembling strychnine.

Jaborandi contains pilocarpine and jaborine. Pilocarpine produces sweating, increases or restores the secretion of milk, urine, bronchial, gastric and intestinal juices. Jaborine directly antagonizes pilocarpine, having almost identically the same effect as atropine. Bartholow says: "As the effect of pilocarpine on the circulation and the sweat glands is so completely antagonized by jaborine, it is in a high degree important, in prescribing the former, to secure a specimen free from the latter." Hence when there is no time for experiment to find whether our drug is going to increase the secretions or dry them up, we will use pilocarpine instead of a tincture or fluid extract.

I am willing to admit that we cannot use alkaloids exclusively, as there are many drugs that cannot be put into that form. We should all study active principles and become familiar with them, and I do not hesitate to say when one becomes acquainted with them he will not go back to the old method under any circumstances.

In conclusion let me say: Let us throw prejudice aside, do anything that will cure or alleviate the suffering, investigate, be of inquiring minds, and accept that which appeals to our common sense and can be vindicated by our experience and judgment.

A. W. TEEL.

Kahoka, Mo.

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This kind of work helps. Will not other

Such trying times as this past season give many a physician an opportunity to take account of stock.—*Med. Fortnightly*.

brethren of the "family" go and do likewise?
Let's stir things up!—Ed.

AMERICAN MEDICAL EDITOR'S ASSOCIATION.

The 37th annual meeting of this society was held at Boston on June 4, under the presidency of that strenuous iconoclast, Dr. Henry Waldo Coe, of Portland, Oregon. This was undoubtedly the most satisfactory session of the Association ever held. Thanks to the ability and energy of the secretary, of the Association, Dr. J. MacDonald, Jr., the society has never been in a more prosperous condition. This year it has added forty new members, thereby raising the membership to one hundred and forty-five, representing ninety-two of the leading medical journals of America.

The program presented at the last meeting was as follows:

President's Address, Henry Waldo Coe, M. D.; The Repeater in Medical Literature, Frank P. Foster, M. D.; Proprietary Advertising, W. C. Abbott, M. D.; The Profession of Medical Editorship, James Evelyn Pilcher, M. D.; Independent Journalism a Necessity for the Profession, Kenneth W. Mellican, M. D., M. R. C. S.; Independent Medical Journalism, J. J. Taylor, M. D.; The Official State Journals vs. the Private Medical Journal, William J. Robinson, M. D.; Original Papers and Abstracts as Seen in Medical Journals, S. D. Crothers, M. D.; Psychiatry and Neurology in General Medical Journals, C. H. Hughes, M. D.; The Scope of the Official State Medical Journal, Chas. Wood Fassett, M. D.

A new Constitution and By-Laws was adopted so as to meet existing conditions.

The officers elected for 1906-07 were as follows: President, James Evelyn Pilcher, M. D., Editor *Journal of the Military Sur-*

geons of the U. S.; First Vice-President, Frank P. Foster, M. D., Editor *New York Medical Journal*; Second Vice-President, Charles F. Taylor, M. D., Editor *Medical World*; Secretary and Treasurer, Joseph MacDonald, Jr., M. D., Managing Editor *American Journal of Surgery*, New York.

The annual banquet was to us one of the most pleasant events in connection with the A. M. A. meetings at Boston. It was held in the beautiful University Club on Beacon street, upon the bank of the Charles river. There was an agreeable absence of restraint and freedom of expression which were in refreshing contrast with some of the more formal events in Boston. The after-dinner speeches were both witty and wise, in agreeable mixture. The delightfully reminiscent little speech of Dr. Henry O. Marcy, of Boston, was particularly enjoyed, while the remarks of Surgeon-General Wyman and of Major Kean of the U. S. Army were thoroughly appreciated by all present. Other good speeches were made by Drs. Frank P. Foster of New York, Britton D. Evans of Morris Plains, New Jersey, Charles G. Cumston of Boston, Ex-Governor Brody of Alaska, W. C. Abbott of this journal, and others.

Every medical editor in the United States and Canada should join this Association. We need you and you need us. There are many problems which need a full discussion at our hands and upon which united action is advisable. Membership in the Association can not fail to be of immense advantage to every member. Come in, Brethren, come in!

WHAT I THINK OF THE ALKALOIDS.

I have experimented a little with the alkaloids lately, with perfectly satisfactory results. If they are not intrinsically superior

All attempts to promote the destruction of poisons after they have once been absorbed have proved abortive.—Croftan, *Med. Record*.

The elimination of absorbed poisons by the various emunctories of the body is always indicated.—Croftan, *Med. Record*.

to the fluid drugs, their tidiness and dispensing adaptability are no inconsiderable points in their favor. They do not gum up your case and are innocent of detritic precipitates. They look clean and self-commending to the patient, and this esthetic feature counts for a whole lot. Other things being equal, it would constrain the "pernickerty" man to adopt their use.

Our alkaloidal friends claim that "other things are not equal." They claim that there is no way under heaven of achieving accurate dosage other than by the use of the alkaloids. [An assertion without foundation.—ED.] They claim that the alkaloid is in *itself* honest; that it is infallibly what it pretends to be—that it *can't* lie. I think the truth of this claim must be admitted. They claim that this is not true of the galenics; that the galenics cannot help lying *some*. I think the truth of this, too, must be acknowledged.

It is understood, of course, that whether a fluid drug is honest, or not, has no *necessary* dependence on the honor of its manufacturer. Ever since they have been in business I have been using Lloyd's "specific medicines" with excellent satisfaction so far as pharmaceutical elegance and drug uniformity are concerned.

But the alkaloids are contesting for the highest place in *certainly* of strength, and they are not having a losing fight. Indeed, it seems to me no thoughtful and fair-minded man can honestly deny them that place.

Whether, with this evident advantage, the fluid galenicals hold more than offsetting advantages, may be a debatable question. Most fluid drugs—tinctures of fluid extracts of an herb—hold other medicinal principles than the herb's alkaloid. The drug spirit of the tincture of aconite is probably not identical with that of aconitine; therefore, theoretically at least, they should elicit more

or less different remedial responses. They are, to a greater or less degree, different remedies, and there is a legitimate place for each of them in the discriminative physician's armamentarium. At least that is the way it looks to me at present. It seems to me, therefore, that there should be no conflict between the alkaloid manufacturer and the fluid-drug manufacturer. Let them lock arms, and each vie with the other in the excellence of his special line of work. There is a weakness in the moral constitution of a man who will let trade-ambition over-ride the demands of philanthropy. Here we are, in a common world with a common destiny; can we, with justice to ourselves, afford to be unreasonable or unfair to our fellow man for mere money?

The enthusiastic alkaloidist will hold that all can be accomplished with the alkaloids that can be accomplished with both the galenics and the alkaloids [An absolutely untenable position never claimed and perhaps (probably) never possible; a mere word-subterfuge of enemies to progress that seem even to have hoodwinked good Dr. Cooper.—ED.] This is certainly a mistake for that remedial nuance between the tincture and the alkaloid is not—at least at present—alkaloidally representable. It seems certain to me just now, that we need both the galenics and the alkaloids. I have not driven stakes around this conclusion and am therefore susceptible to convincing logic.

I am glad the alkaloids have come into such prominence. They represent the largest stride ever made in favor of that precision in dosage, which, next to the use of the right drug, is the most important feature of drug-giving. There is this about it too: There are a great many progressive physicians in the old school who do not take kindly to the pretensions of the "liberal" schools, and who have been driven nearly

Best of all cholagoges are the bile acids and salicylates; the latter are irritating to the kidneys.—Croftan, *Med. Record*.

To prevent malaria Celli finds that 6 to 9 grains of quinine daily are necessary, bisulph. or muriate.—*Med. Record*.

into drug nihilism by the uncertainties of the usual galenics, who will be tempted to try the alkaloids. They will prove to be a revelation to them, and they will add themselves to the rapidly increasing army of medical reformers. God hasten the day when therapeutic haphazardism shall fall back into a hungry oblivion.

W. C. COOPER.

Cleves, Ohio.

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The above from Dr. Cooper, coming as it does from the very heart of eclecticism, is doubly welcome. On the whole, with the exception cited in the text, it is probably a very fair statement of the case. There is unquestionably much of individual good to be said about the galenical preparations, especially those that are made with the care that characterizes the effort of the modern manufacturing pharmacist who sees his prestige oozing away, the only possibility of bolstering it being approximate accuracy in his product which he attempts to bring about by so-called "standardization." No one, excepting the mere tyro, would be foolish enough to say that any single alkaloid or active principle necessarily represents exactly a given preparation or quantity of the drug from which it may be obtained. How can certainty be compared with uncertainty?

The active principle, in its pristine purity, is a single remedy with a distinct physiologic action, therefore it has a distinct, definite therapy of its own. The better one is versed in galenical therapeutics and practice, the more easily can he take up the alkaloids, yet the best of us in attempting accurate, definite medication have much to learn, much to unlearn, much to experience, many decisions to make and many errors to forget. When we speak against the galenics as being uncertain and unsatisfactory, we speak of them as a whole. When we speak

of the active principles we speak of them also as a whole, recognizing that while there is much of individual praise for the one, and not a little of censure, as yet, for the other; thanks to the trend of modern pharmaceutical chemistry, there is being shown daily to be more and more of the former, and unequivocally demonstrated to be less and less of the latter. There is work to be done and while the impetus is being given by the worker of today, he of tomorrow has a still greater before him.

Surgery has evolved to higher planes, almost, it would seem, to the acme of possibility. Medicine is rapidly evolving in its wake and when this same great army of surgical clear-thinkers, who by reason of galenical uncertainty have become practically therapeutic nihilists, really awake to the possibilities of accurate therapy, as presented in the active principle, then surely will there be something doing. Surgery needs therapeutics, but definite surgery refuses to depend upon uncertain therapy, and well it may.—ED.

CROUP—AN EXPERIENCE.

This may help some physician. About 11:15, on the night of November 21, Mr. E. E. E. jerked my door bell. I got up out of a sound sleep and admitted him. He said very excitedly: "I want you to come to my house as quickly as possible. My little girl has the croup. Don't wait for your horse and buggy, get into my buggy, which is at your front gate."

I grabbed my medicine case and got into his buggy. He put his horse to a keen run for two miles west. On the way there he told me his daughter went to bed about nine o'clock, well as usual. At 11 o'clock she was taken with a croupy cough and struggling for breath, and—"I expect

A French exchange says medical women never devise anything and only take up an idea when it has been generally accepted.

We do not know French medical women but ours are quick enough to catch on to any good thing without waiting for fashion to reach it.

she is dead. As I started for you it seemed to me she could never get another breath."

When I arrived the house was full of people, and I found a six year old girl, apparently breathing her last. I measured five teaspoonfuls of hot water added five tablets of calx iodata and administered a teaspoonful every five minutes until all was taken. I then made a similar mixture and gave a teaspoonful every ten minutes, then a little later I ordered a teaspoonful every fifteen minutes; but before it was all given the child was asleep and was breathing naturally. In addition to the calcidin I applied cold to the head, heat to the feet, and cloths rung out of hot water to the throat and chest. The child slept all the balance of the night and got up and went to play next morning and has been well ever since. Iodized calcium has never failed me in croup, but before I got in the habit of using it such a case as the above always scared me "plumb to death."

J. L. EDWARDS.

Florence, Colo.

CALX IODATA IN PYOSALPINX.

Yours of recent date relative to calx iodata at hand. But, Doctor, I did not have to try it before writing this letter, as I have found out its efficacy long ago.

I have used it in many cases that I have never seen it recommended for by any of the brethren in your valuable paper—one class of diseases, especially, viz., pus-tubes. I find it a specific in suppurating middle-ear diseases.

If I were any kind of writer, I would like very much to send some article for the JOURNAL, but, as it is, I have to use all the good things and be silent. Nevertheless, I use nearly all the alkaloids, and find the teachings of your JOURNAL all right. I

No man who has not had full experience as a general practitioner can well edit a journal for that class.

write prescriptions entirely. The druggists here are all supplied with alkaloids, and say that my prescriptions are the easiest to fill.

I like the foot-notes; also derive a lot of benefit from the queries and answers.

W. A. LEMIRE.

Escanaba, Mich.

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We are indebted to you for your suggestion. We do not see why calx iodata should not be useful in pyosalpinx. May we suggest that you alternate calcium sulphide with it. We shall take the opportunity to experiment along this line also. If calx iodata is efficacious in pyosalpinx then it certainly should be useful in middle-ear diseases of a suppurating character.

Do not believe for a moment, Doctor, that you "cannot write." We can gather from your communication that you could give us something practical for the JOURNAL on these subjects and we trust you will favor us.—ED.

PERTUSSIS.

We seldom speak out in meetin' and now simply nod our heads in approval to what Dr. Crawford has said about Pertussis in July CLINICAL MEDICINE—except we think we can diagnose a case before the characteristic whoop appears and like you, Mr. Editor, we want him to throw calcium sulphide into his treatment. We wish your JOURNAL could be in the hands of all Delaware doctors. Do many of them get it? One dollar enclosed for subscription.

W. T. JONES.

Laurel, Dela.

—:o:—

Yes, Brother, many Delaware doctors get CLINICAL MEDICINE, but not nearly as many as should. We need the help of every member of the "family" in getting it

A man must occupy the field of general practice before he can judge of the needs of men in a like position.

into the hands of every medical man now outside the fold.—Ed.

CALCIUM SULPHIDE IN WHOOPING COUGH; AND CALX IODATA IN DEGENERATION.

Dear Dr. Abbott:

Your very kind favor has just been received. Accept my thanks for your welcome, though unexpected, letter and the whooping-cough granules. I am pleased to say that the child is now entirely well, and, thanks to calcium sulphide used as a preventive, the baby did not take it. Calcium sulphide and calcidin are my sheet anchors in many otherwise troublesome cases.

Let me tell you in a few words what has been done for one very bad case by calcium iodized—for I think you deserve all the praise anyone can give you for your helpfulness to the medical profession.

A woman of 75, unmarried, had been afflicted seventeen years with glandular fistulas about the buttocks and hips. Whenever pressure was made in sitting and lying, lumps would form the size of a hen's egg, especially at the end of the spine and on the shoulders. After a time they would break down, discharge and remain open, continuing to discharge.

No doctor had given her relief. She was a mere skeleton when she began treatment with me in September, 1905. Her skin hung in wrinkles on her bones. She could not walk a block without help. She was weak, emaciated, suffering, and would stand at the window for hours because of pain when sitting or lying.

In four months she had gained fifteen pounds, could sleep all right, walk a mile alone, go shopping and not feel tired and was enjoying life as never before for years, and calcidin did it! She can take only mi-

nute doses—one to two tablets, 1-3 grain each, in the morning. The first month she had three grains a day. Her tongue became red and sore from the lime after a time, so I had to cut it down. She is still taking two tablets (2-3 grain) a day and the big fistulas are all well. The big lump on the shoulder is gone and the one on the spine is smaller and soft and is disappearing rapidly. She has no more pain or inconvenience. One fistula is still discharging slightly. General health greatly improved.

S. N. MERRICK.

Boston, Mass.

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This merely shows what can be done for many chronic cases by elimination and general systemic antiseptic and up-building treatment such as we get from calx iodata, which combines iodine, the disinfectant, and lime, the tonic, a very admirable selection in this case. I have no doubt other indicated remedies were used, although the above is the only information at hand.—Ed.

CALCIUM SULPHIDE; A CONTRIBUTION TO ITS USES.

This chemical, commonly but incorrectly known as "calcium sulphide," should hold an important place in every physician's equipment in both surgery and therapeutics. In the latter it has already attained an enviable position with many practitioners, and the text books are beginning to give it more prominence in their pages. Little, however, is said in regard to its prophylactic properties as a preventive of many catarrhal affections of the nose and throat, to say nothing of internal tendency to effusion and degeneration.

Exhibit this drug freely and many cases of suspected diphtheria do not materialize; the anticipated "quinsy sore throat" does

Keen as our sight may be, we see but one side of the mountain as long as we stand anywhere but at the peak.

The easiest thing in the world is for a man to stand at one side and find fault with the men who are doing the work.

not appear. Of course, this is given in addition to other proper treatment in these cases. Its usefulness in measles is remarkable. I have found it very easy for susceptible people to become a prey to this disease. I believe that it is possible for some to take measles by just entering a house where there is a case, even though the same is confined in the farthest corner.

I remember that a colleague was attending a case of measles in a postoffice, there being at least two rooms with closed doors between the office and room where the patient was confined. No sulphide was given. A patient of mine in a hotel was in the habit of going to the postoffice every day. She had no fear of measles, traveled around with impunity even in the coryzal stage (thinking it only a cold, for the postoffice-residence had been quarantined but not the postoffice, even though it was in the same building), until she spread the disease to another town and to another person in the hotel. Only part of the hotel was under quarantine, but calcium sulphide to saturation in both of these cases lessened the strength of the disease so that there were no more cases in the hotel even in people who were temporarily lodged there.

It was during a very busy time of the year for the farmer, when a case of measles broke out in two homes. In one house the sulphide was given to all, as well as the patient. In the other house none but the patient received it. In the latter all the members of the family had the disease, while in the former none but the patient. A very old lady who usually had a very hard time in sickness, was exposed to measles. She was put on the sulphide, gr. 1 (six granules, gr. 1-6 each), t. i. d. It looked as though she was going to escape, but within three weeks she had a very light attack. Many illustrative cases of this kind could be given, but enough have been given

to show that the sulphide either prevents the disease or modifies it so as to produce a light form.

In regard to diphtheria, with this and other antiseptic treatment I have not had occasion to use antitoxin during the last five years. I have had it ready, however, but improvement would rapidly take place within twenty-four hours under the sulphide treatment, so I have not used it.

Among many physicians calcium sulphide has gained quite a reputation for boils. It is very gratifying to have patients whom you have treated for this trouble, when they have moved twenty or thirty miles away, send to you now and then for the "little pills for boils." It shows that it is not so much used as it ought to be.

It is in surgery that I have come to regard calx sulphurata as a sheet anchor, either to prevent pus or to rapidly get rid of the same. In every abscess, no matter how well evacuated, it is a matter of routine [and a good one too—ED.] with me to give the drug. In all cases of septicemia it is pushed to saturation with unvarying success, if the patient is seen reasonably early in the disease. After every operation, no matter what it is, I have given the sulphide, and I have yet to see my first case of post-operative pus. I give it after broken bones or sprains and in every case it seemed to have a salutary effect. It has a beneficial effect upon all forms of inflammation and catarrhal conditions. In this connection, though not surgery, I have given it for naso-pharyngeal and pharyngeal catarrh, and have been pleased to have the patient tell me, "I have got all over my catarrh."

In obstetrics after every case of confinement I give it as a prophylactic against puerperal fever, and have yet to record my first rise in temperature. The same results are obtained in abortions, even

When Angelo cast a statue one helper said, "It is a success;" the other, "The heel is imperfect." Which was right?

Frequently repeated and long-continued irritation is an exciting if not the principal cause of carcinoma.—Senn.

though there is some retention of membranes.

For a general body antiseptic, in my opinion, calx sulphurata has no equal. I am surprised that it is not more widely used. I know of no hospital that uses it. I think that they seem to be afraid of it. At one hospital I wanted it used for one of my patients in whom I was particularly interested, whose temperature was gradually going up after an operation. After some hesitation it was used in 1-4-grain doses, t. i. d., and in less than thirty-six hours the temperature was down to normal.

It quickly gets rid of pus in all forms, and if given early it effectually prevents its formation. I have not yet found a patient unable to take it. It is a great deal better than sulphur and lime, which one physician suggested to me would act in a similar manner. This, however, is a fallacy. I know of nothing that will do the same amount of work giving as good results.

The 1-6 grain coated granule, put up by The Abbott Alkaloidal Co., I find by far the best preparation obtainable. I have experienced no trouble in giving it to the weakest stomach, where it has been indicated, from infancy to old age.

J. M. WATSON.

W. Hartford, Vt.

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The story of *real* calcium sulphide (*calx sulphurata*) has been told in the JOURNAL many times; but never better than by Dr. Watson, whose statements we unqualifiedly endorse.—ED.

ENTERIC FEVER—ITS ETIOLOGY AND TREATMENT.

The importance of etiology and a rational therapeutics based upon the causation of disease have in a large measure been ignored

by a greater devotion to diagnosis and statistics. With no desire or intention of underestimating their value and place in the sphere of Medicine, a recognition of the paramount importance of the causative factors of morbid action claim our highest estimation.

Before the advent of the theory advanced by Sir Joseph Lister a half century ago, the treatment of certain conditions revealed the fact that our peers "built better than they knew." Accepting the technic of the lamented Dr. Geo. B. Wood as a type of the physicians of his age, the medicaments utilized by them, while empirical to a certain extent, were undoubtedly curative through an antiseptic influence. The treatment, he adopted in practice, and which he taught the students of the renowned University with so much potency and admirable simplicity is gracefully in accord with the methods embraced in the literature of our esteemed friend, Dr. W. C. Abbott, of the editorial staff of THE AMERICAN JOURNAL OF CLINICAL MEDICINE. The former's advocacy of citrate of potash in the form of neutral mixture or effervescing draught, as indicated by the absence or presence of nausea, with the addition of sweet spirit of niter, Hoffman's anodyne or camphor water for the alleviation of nervous symptoms, constituted the sheet anchor of treatment of both idiopathic and symptomatic fevers.

Appreciating at the time the simplicity of his therapeutics, and its easy application to morbid conditions, while representing a rational system, it failed to make the impression upon the mind of the writer, which took possession of his mind in later years, and which in these last days through the writings of the Editor of CLINICAL MEDICINE has been accepted as a scientific fact.

In no disease does the value of antiseptics

Warts on the forehead, cheeks and hands of aged persons most frequently undergo malignant transformation.—Senn.

Wealth is like the winking of an eye,
The most unstable of friends.

—Havamal.

reveal itself to a greater degree than in the treatment of typhoid fever. Recognizing it as a germ disease whose field of conquest is primarily in the intestines, it seems pre-eminently the part of wisdom to attack the enemy in his stronghold rather than care for the wounded after the battle. The modern treatment of this malady mainly in vogue, is based apparently upon the assumption of a self-limited disease. Attention to the diet, reduction of fever by hydropathic methods, and external sanitation constitute the main features of their therapeutics.

In the case of Miss Agnes G——, under consideration, from the time of its inception on the fifth of May to the evening of the fourth of June, when I was called, a prescription for the headache of the early stage, cold sponging for the reduction of fever when the temperature reached 103° F., with a milk diet supplemented by animal broths constituted the treatment. The meager therapy lacked the moral influence of doing something for the patient, and the inspiration of confidence in the medical attendant.

With the credence reposed in the efficacy of antiseptics, represented by Henry in the advocacy of thymol, whose virtues he lauds in the following significant language: "The typical symptoms of typhoid fever will rarely develop if thymol is administered during the first week of the disease," the treatment instituted in this case was comparatively nil—not even approximating the optimistic of the leading writers and teachers of galenical medicine.

With becoming deference to the eminent advocates of hydrotherapy, Currie, Brand, and Jurgensen, the treatment seems directed more especially to a symptom of the disease rather than to the etiology of the affection. While the temperature of a

typical case presents an evening exacerbation, the fluctuations in the subject under investigation revealed little regard to the period of the day. For five weeks the body heat ranged from 100° to 105 1-2° F., apparently influenced solely by a sponge bath of ice water faithfully applied by the devoted mother.

Throughout the disease, the patient was apathetic and somnolent, totally indifferent to surroundings and oblivious of the gravity of her case. When I interrogated her relative to her feelings she replied "pretty well."

On several occasions blindness was present for a brief period—a symptom I have never observed. Of the authors I have consulted, Pepper in his American Text Book on the Theory and Practice of Medicine alone refers to it as having been observed. Neuritis of the feet existed for a short time but yielded promptly to an application of laudanum and glycerin.

The depression of the nervous system naturally arose from the exhaustion incident to the high fever, its resulting debris, and the existence of toxemia—their influence being decidedly expressed in the dusky countenance. The condition imperatively appealed to the administration of antiseptics. In the recognition of this indication, I prescribed the sulphocarbolate of sodium. Its influence was signally manifest in the clarification of the skin, and declension of the apathy on the second day, while on the following day, there was a returning interest in the environments. While these evidences of improvement might be assumed as indications of the turning point of the disease by the advocates of the self-limited character of the malady, yet the statement of the previous medical attendant, relative to its extreme gravity, and that of Henry—that "the typical symp-

Often is good that which the aged utter;
Of from a shrivelled hide
Discrete words issue.—Havamal.

Inde vasorum debilitas, laxitas, robur, rigiditas, elasticitas, de quibus multa imperitis memorantur clare intelligi possunt.—Boerhaave.

toms of typhoid fever will rarely develop if thymol is administered during the first week of the disease," militates against any positive assurance of this nature.

While the loss of her hair, and a debilitated condition of system attest the severity of her disease, yet the indications point toward a complete restoration of her normal state of health.

L. S. BLACKWELL.

Perth Amboy, N. J.

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The improvement following the use of the sulphocarbonates is not an accident or a coincidence—as every physician who uses these remedies habitually in treating this disease can testify. The change in the condition of the patient, provided the bowels are kept properly clean and as nearly sterile as possible with these salts, is so rapid in its appearance and so decided that there is no room for argument. Be sure that your sulphocarbonates are pure, give them in the form best suited to the needs of the patient (the compound tablet generally best meeting the indications) and the results desired *will* follow. Try this method, brother, if you have never done so.—ED.

BABY INCUBATORS—HOW THEY WORK.

Relative to your inquiry, I would say, that the air furnished to babies in incubators is not sterilized air but pumped air. To give you the most accurate information I talked with my friend Dr. Martin Conney, who has the system of perfected incubators represented by incubator hospitals now exhibiting in most of the large cities, some temporarily and some of which are permanent, such as the ones at New York and Atlantic City and at the White City, Chicago. Dr. Conney is

the inventor and is a genius in anything pertaining to baby life.

Briefly, the air comes through a large pipe directly from outside (out of doors), passes over moisture, then is filtered through a system of dry cotton which collects the particles of dust, solids, etc., and is raised to the required temperature by the heating system; an automatic hot water system of pipes, and a chimney at the top of the incubator affords a draught so that there is a change of air every five to ten seconds.

The baby rests on a suspended bed which consists of a wire spring so delicate that the child itself can move it. The pillow and mattress are of jute—a vegetable fiber, non-absorbable, and these are changed and the used one thrown away each day and oftener if soiled by excretions and regurgitations of babe. All clothing about the child is sterilized, and feeding is all done by wet-nurses who are ideally cared for, have no domestic tragedies for the time at least, so baby's milk supply is not liable to sudden changes or local thunderstorms; therefore it seems to me the incubator baby has much the advantage of the baby born under the usual family conditions.

EFFIE L. LOBDELL.

Chicago, Ill.

A REPORT ON A CASE OF CHOREA IN A FIVE-YEAR-OLD GIRL.

On May 17th, Mrs. — brought her child to me for treatment. On looking at the child I saw that she had chorea in a very grave form. She was almost unable to stand alone on account of the violent movements. After inquiring as to worms and her general history, I made both a rectal and vaginal examination and, the results being negative, I put her on the following treatment:

Herbivora are much less liable to carcinoma than carnivora, but the Eskimo appear immune to all tumors.—Senn.

Sedem habet jam nata maxime primae digestionis officinae, inde tardius cruorem, densque omnes humores inficit.—Boerhaave.

I ordered saline laxative mornings and two granules of arsenic after meals with two of hyoscyamine, 1-250 grain, at bedtime. I called to see her May 22, and found she was no better. I ordered three granules of arsenic after meals for three days then to give an additional granule every third day until my next visit, the hyoscyamine being increased to three granules at bedtime.

My next call was made May 30, at which time she was taking five granules of arsenic after meals and three of hyoscyamine at bedtime without any improvement. I now ordered six granules of arsenic after meals for three days, then to be increased to seven granules after meals with two granules of hyoscyamine at 9 a. m., 3 and 9 p. m.

I called on her June 6, when I saw a slight improvement. I now ordered eight granules of arsenic after meals and two granules of hyoscyamine at 9 a. m. and 3 p. m., and three granules at 9 p. m. Called June 12, and found her much better. I ordered the arsenic to be given eight granules after meals, with three granules of hyoscyamine at 9 a. m. and 3 and 9 p. m.

I called on her June 17, and found her greatly improved but kept her on the same doses of the medicine until my visit on June 24, when I found her almost well.

I now ordered her to take six granules of arsenic three times a day and three granules of hyoscyamine at 9 a. m., 3 and 9 p. m. I called to see her on June 28, and found conditions as follows:

Movements entirely abated and feeling well. Ordered four granules of arsenic, three times a day with two granules of hyoscyamine at 9 a. m., 3 and 9 p. m.

I called July 3, and the patient being well, I reduced the arsenic to two granules three times a day and the hyoscyamine one granule three times a day.

I called July 7. The patient being well,

In many countries, where cigaret smoking is to excess, carcinoma of lips and mouth is of rare occurrence.—Senn.

I put her on triple arsenate granules one after each meal and gave her enough granules for a month. During the above treatment she had neither diarrhea nor vomiting from the arsenic, in spite of the large doses taken.

W. F. RADUE.

Union Hill, N. J.

CORRECTION.

Our attention has been called to an error in the formula on page 893 of the July number of CLINICAL MEDICINE. Dr. Smith is made to give four granules of aconitine amorphous, 1-30 grain each, in a three-ounce mixture, a teaspoonful of this to be given every fifteen minutes to children three or four years old. He really wrote 1-134 grain in each granule. Please make this correction in your July number.

WHAT ONE DOSE OF APOMORPHINE DID.

Dr. Charles E. Buck's account of his satisfactory experience with apomorphine in the July CLINICAL MEDICINE recalls a very interesting case I had last spring in which this much discussed drug played an important role. I was called about midnight, to see a boy nine years of age and could hear him screaming with pain before I entered the yard. It only required a glance to note the enormously distended abdomen which really looked frightful and appeared almost to extend from the chin to the pubes. I inquired very particularly what the child had eaten for supper and the father as particularly assured me that the child had eaten nothing which he had not been accustomed to eat daily.

I gave the child 1-20 grain of apomorphine hypodermically and awaited results. In a little more than four minutes he began to vomit and this is what came up: A white

Betel chewing is unquestionably responsible for the frequency of carcinoma of the mucous lining of the mouth.—Senn.

mass of partially digested food about the consistency of dough when ready for the oven, about ten inches long and moulded to conform to the esophagus as it was forced through that passage. It looked almost like a snake coming from the boy's stomach and the parents were greatly alarmed on seeing it appear. It required nearly a minute for the mass to be vomited and there was absolutely no other vomitus except this one snake-like mass, the end coming first being tinged with blood. When I saw what was coming I held a newspaper under the boy's mouth to catch it and it had no sooner dropped on the paper than the boy turned over and went to sleep. I gave him no other medicine and next morning he was up and around as usual. However, I learned next day that the family had butchered on the day before and the patient had partaken freely of fresh pork despite the father's assurance to the contrary on the previous evening.

W. L. SHELTON.

Woodlawn, Kans.

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Another of our readers reported a similar case not long ago. All the symptoms of an alarming toxemia were relieved when a long, snake-like piece of pork rind was vomited up. Clean out—stomach too, sometimes.—ED.

FROM A DOCTOR WHO ADVERTISES.

I have read many articles lately, in different medical publications and magazines pertaining to the advertising of physicians, and it prompts me to add my mite to the discussion. When we look around us and see the vast amount of advertising carried in every publication, by commercial men, and see the vast amount of business that is done by advertising, it proves that advertising pays. Men like the late Marshall Field,

like John Wanamaker, and firms like Sears, Roebuck & Company and Montgomery, Ward & Company, have established their business wholly by advertising. Then why should not medical men advertise? This is the question. Is it because they are told it is dishonorable by the medical code of ethics? I know of at least one hundred physicians at this moment who would advertise if they were not afraid. Why should it be honorable for a merchant to advertise and dishonorable for a physician? I don't think this is reasonable.

I was what is called "ethical" for eight years, and I got all the so-called "ethics" I wanted during that time and some to spare. Being a young man at the time I started to practise medicine, and not being endowed (fortunately) with a large crop of whiskers, I will admit I looked rather young, but if my elders had followed the "good and righteous path of ethics" they would not have tried to make me appear as a brainless idiot in the eyes of my patients. It is a very pleasant (?) position to be placed in, when you have a sick patient and a consultation is called, often at your suggestion, to have "Dr. Smartinski" take pains to make you appear foolish in the eyes of the whole family and all the neighbors, isn't it?

This is the ethical way of advertising, in other words, it prevents you making any head-way in your profession. If a man ever makes a reputation it is not made in consultation, if the consultant can help it, I assure you.

You have all been placed in this position, I suppose. Fine code of ethics, isn't it? Now I don't mean to say that all physicians would do such a dishonorable act, simply because they had an opportunity—and you no way on earth to square yourself, but I know a number that will. The best code of ethics I know of is written in four words—

La degeneration graisseuse; c'est la qui fit le danger de la digitale; aussi la donnaï-je tres peu et presque a contre-cœur.—Peter.

Une tendance que l'on doit deplorer, c'est d'etablir des equations toutes faites entre la maladie et le traitement.—Peter.

Be fair and honorable. [And that's what "the code" calls for, but good as the code may be it cannot control dishonorable conduct, therefore many are the sins committed in its name.—W. C. A.]

I shall long remember the first case of gallstone colic I ever saw, and I may add that it was a very severe case both for the patient and for me. I had just located in a little town in upper Michigan, in a French settlement. I was not absolutely sure of my diagnosis and I asked for consultation. The husband expressed a desire for a surgeon whom I had heard of but never met. I told the man that he was a very able surgeon and advised him as a consultant. He came—and had he not been pointed out to me as the eminent surgeon I should have taken him for the "hired man." The aroma that he carried with him resembled the odor of a sausage factory—"vintage of 1888"—and the ado he made when he reached the patient resembled noises at the Chicago Stock Yards at mess time. He was advertising himself (ethically) so I suppose it was necessary for him to go through all this to make him appear "bright."

He was told, coming from the depot, that I was at the house, but he didn't wait for an introduction or any such formalities, but proceeded to examine the patient. With a large stethoscope he listened over the gall-bladder, then he said to me in a deep voice, in the presence of about twelve people:

"Doctor, you have a bad case of gallstone colic here, and the patient should have been operated upon yesterday."

The old story of being called just "a little too late."

He was advertising and it paid as you will see later. The patient, as a matter of fact, was not sick "yesterday," but it did not relieve me. The surgeon had the floor—and used it too—ethically. I never got my pay

for services rendered in this case and never was called to this family or any of their relatives again. This outburst from the eminent gentleman (?) fixed me for all time. He "gave me both barrels," so to speak, and, after explaining the severity of the case and my seeming negligence, to the husband, *after I left*, he took the patient away to the hospital, received \$250, operated, the patient died, and I was blamed for the death.

The day the operation was performed a local paper gave a "write up" of the wonderful display of ability of this great surgeon—mentioning his name—and from the tone of his article the public would imagine that this was the first gallstone operation ever performed in America. But it was ethical. [No, it was not! Far from it.—W. C. A.] Now if a man advertises in the papers and pays for it he is a quack, a fraud, an impostor, and everything else—according to "ethics." I have never been able to see the difference between the quacks and the ethical. I will admit that there are some men who advertise fake things. I condemn these men as much as any man, and I know, too, of ethical men who do things that are not what they should be.

Now this is one way of advertising. I spent eight years going against such knocks as this, but made a fair success, nevertheless, despite it all. I decided three years ago to advertise and pay for it, and I started and have made a greater success and have been entirely free from such painful instances as I mention above. I would sooner be called a quack than have a man steal my food. I advertise no cure for venereal diseases, nor anything that is not legitimate, I carry on a practice I am proud of and I can look every man in the eye. I stand back of my work and no one can justly criticise it. I know physicians who criticise and belittle advertising men from "a" to "z"

J'en dirai autant du chloral et du bromure de potassium que l'on emploie a tort et a travers sans discernement.—Delasiauve.

Le chloral est dangereux pour les femmes nerveuses; je les ai vues souvent plus malade apres l'administration de ce medicament.—Forget.

at every opportunity—and condemn them as the most dishonorable living mortals, even though they have never met them. This helps the advertiser. I advertise that I do no surgical operations but direct my surgical cases to a competent surgeon. Some of these men who condemned me have called at my office and asked me to direct cases to them. They would “split the fee, treat me right, etc.” When I get a case I collect the fee and keep it. When I direct a case to a surgeon I want him to collect his fee and keep it.

I object, as much as any one, to a man who advertises unclean business and I object just as much to a so-called ethical man’s doing things that are not “on the square.” So what I wish to know is where the line of demarcation forms between the “quack” and the ethical. I am not from Missouri, but from Michigan, but I must be shown. The man who does what he deems best, does the greatest good for his patients, pays his bills and is square in all his dealings is the one who wins whether he advertises or not.

G. C. M.

—, Michigan.

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Because we believe in publishing “the other side” we give this doctor a hearing. The arguments which he uses are those most employed. Because other men have practised all kinds of meanness, have “advertised” under the cloak of “ethics,” have injured me when I was a struggling young doctor trying to get a start in life, therefore all ethics is a sham and I’ll none of it. That’s the argument. Now, we haven’t a word of excuse to offer for the “ethical” brute who makes capital out of the ignorance or gullibility of his patients, or who on consultation will deliberately set about undermining the confidence of the patient and his friends in the attending physician. The English lan-

guage is not rich enough in expletives to express our contempt for such a man. The pity of it is that there really are such men. But they ought to be “sent to Coventry” by the united action of the decent men of the profession. The methods such men use to secure publicity or prestige are not *advertising*—it’s just pure unadulterated cussedness. Furthermore, the example set by such a man is a mighty poor excuse for becoming an “advertising specialist.”

The professional ideal, from which we, of course, fall short, but toward which we should strive, is that every man should be judged absolutely upon his merits. His success should depend upon his ability to cure disease; should be measured by his knowledge and his resourcefulness. Is that the ideal of the advertising doctor? You know it is not. It is to; so cleverly write your ads (or have them written) that people who know absolutely nothing about you and have no way of knowing the work you can do, shall believe you endowed with powers of healing which are denied to other doctors. Isn’t that the effort of every advertising man? Personally I have never seen the advertisement of such a doctor in the daily press which did not carry on its face the evidence either of dishonesty or inconceivable self-esteem and ignorance. And I express it as my opinion that even an honest man who may embark in this form of practice (and I do not deny that there may be honest advertising physicians) will sooner or later suffer an obtunding of conscience which will warp his judgment in deciding between right and wrong.—Ed.

THE FRESH AIR CURE FOR CONSUMPTION.

The history of medicine is full of anomalies and contradictions. As yet it is far from

On ordonne le médicament a la mode; c'est la vogue que l'on suit et non pas l'etude rationnelle du médicament.—Forget.

Luckily, for one wild digitalis there are ten cultivated dispensed, completely inert and inoffensive.—Burggraev.

being an exact science. In reality it can lay no claim at present to being a science at all. "Medical Science" is a misnomer. It is an art. "Medical Art" would be more appropriate.

One physician arriving at the same diagnosis as a brother practitioner, will treat the case upon entirely different principles. With the same findings before them two equally competent physicians will arrive at diametrically opposite conclusions as to the nature of a case and pursue different methods of treatment.

This is not science. Two equally competent mechanical engineers could not thus vary in opinion in regard to any law of kinematics. No two equally expert astronomers or chemists, could vary materially upon any scientific fact known to their professions. These are exact sciences.

But two physicians educated at the same schools and equally versed in so-called medical science, will in the application of medical principles as taught in the books and schools meet with varying degrees of success. The patient of one will lose his life, when by all the known rules of his art he should have recovered; while the patient of the other who according to the same standard should die, will recover. A man died the other day full of years and honors, who fifty years ago was rejected by the medical examiner of a large life insurance company. His friend who was examined for the same kind of policy, by the same man, on the same day, was accepted for a \$50,000 policy. Three years after this policy holder died of tuberculosis.

Yes, medicine is simply an art, and is still in the experimental stage. Its practice is merely empirical. Like the law it is governed largely by precedents. A be-wigged old judge in the time of Henry VIII said that, according to law and pre-

cedent, a black sheep was evidently a white sheep, claiming to be a black sheep, therefore browsing on the king's pastures under false colors, and his life consequently forfeit to the crown. A long line of equally profound, if not equally gowned and wigged judges ever since have referred to this decision as if King Henry's judge were infallible, and repeated his decision wherever similar cases or those construed as similar have come before them. Two or three thousand years ago Hippocrates described a certain kind of face (just as we now speak of the automobile face) as indication of certain pathological changes; he also described a peculiar deformity of the fingers. Now when a doctor sees a face which he thinks is hippocratic, or fingers which he regards as similar to those described by the Father of Medicine, he unconsciously jumps to the same conclusion reached by Hippocrates. Medicine and Law! Start them down the same toboggan slide of reason and common sense, and both will brain themselves upon the gory and musty stones of precedent. The one is not necessarily equitable, nor the other infallible, because both are weak and handled by minds of men with all their human limitations.

As with any other art, the successful practice of medicine resolves itself into a matter of personal skill and expertness. Many a plain, plodding, country doctor who could not pass an examination for admittance even to a modern medical college, has often battled alone with an epidemic of typhoid fever or pneumonia and come out of the conflict with a much lower death rate than the combined skill and science of the professors of one of those big medical colleges can show sometimes for the treatment of the same number of cases.

We take no time to experiment; there is no scientific experimentation but innovation, and nothing more.—Forget.

"The physician should dread his own drugs" — Pessimism! Is *this* the doctrine to be inculcated to the country doctor?—Burggraevé.

The country doctor perhaps had less scientific knowledge, never owned a microscope and would not have known the pneumococcus if he had seen one; he may never have heard of most of the high-sounding, newly-coined medical terms; but he had lots of good, hard horse-sense, and tough experience had familiarized him with the art of handling these cases. Yes, medicine is an art, and success or failure in it depends as much upon the personality of the practitioner as any other art.

Cures for consumption! We enter here into an infinity, for their name is truly legion. After long and laborious investigation, Koch announced that a culture of the bacillus tuberculosis, prepared and administered according to his prescription, would cure consumption, banish it from the earth, so that "The Great White Plague" would be known and feared no more. He soon had a large following, for he was and is a great and good man, deserving of honor and reward, and his followers thought such a learned man could not be mistaken—but he was. When this fact became known, somebody else discovered another and better lymph cure. The last and greatest is something a few drops of which injected into the body of the new born babe renders him immune to the White Plague forever! While he was about it, it is a pity he did not fix it so he would also be immune against all the other ills of humanity, and become immortal!

So much for parallels. The deduction to be drawn from them is that the particular "fad" which forms the heading of this article is nothing more than an entity among the legion of consumption cures, and will have its day, and finally be relegated to its legitimate sphere. I never hear of people sleeping outside on cold, damp, windy porches or in wire netting tents on the lawn, that it does not remind me of the man who

got up and went out one zero night, thinly clad, to hold his poor howling dog out in the cold until the bark should be frozen out of him. The theory was all right, but he soon found out that before the dog froze, he was in a fair way to become a stiff himself.

We may freeze out the bacillus, it is true, if the patient can stand it long enough. Can he? My object is not to throw cold water on outdoor sanitariums and discourage efforts in the direction of giving patients all the possible benefits of outdoor air and uncontaminated oxygen. The principle underlying this method of treatment is no doubt correct, but I want to warn consumptives against expecting too much from it and neglecting other and better known remedies. It is well to get all the fresh air possible, and to fill the lungs with it as deeply and as often as possible; but it is unnecessary to go to such extremes as have been advocated. An open window in a patient's bedroom, so arranged in relation to his bed as not to cause drafts, will in my opinion furnish all the fresh air needed, provided he uses it. The trouble with weak lunged people is that they do not use the fresh air they have. They do not take deep inhalations often enough.

It may be laid down as a rule to which there are no exceptions that outdoor life never yet cured a single case of consumption. Such cases have undoubtedly recovered, or all our clinical reports are unreliable; but I defy anyone to prove that fresh air was anything more than *one* of the factors in the cure. The occupation and exercises of outdoor life improve the digestion, assimilative and nutritional forces, and thus overcome diseased processes. Nature has wisely provided living organisms with a means of self-defense against the ravages of disease. These are called to arms the moment any substance

Even chloral and bromide, fractionated and adapted to the intensity of the symptoms, will prove useful.—Burggraeve.

In heart cases with anemia, associate digitalin with strychnine, arsenic, iron and phosphoric acid, as heart toners.—Burggraeve.

inimicable to life invades the body. But where from ignorance, wrong living and unhealthy habits, the defensive standing army of the body is decimated and weakened, it wages an unequal contest with its foes, and in the end is conquered, and its citadel occupied by the enemy.

The object of modern therapeutics is to reinforce the defensive army of leucocytes so as to enable it to conquer the foes of life. Oxygen is undoubtedly a valuable reinforcement in all cases. But it is very unwise to leave it to bear the burden alone. We must bear in mind that there are other efficient germicides and bacillicides. Koch was right in his premises, but he did not find the right key. Tuberculosis is not simply a disease of the lungs. In fact, it would not be incorrect to say that it is no disease at all. The bacilli of tuberculosis of pneumonia and a hundred other fatal diseases often find temporary lodgement in the nose, mouth, throat and lungs of healthy individuals. But they never get a chance to do any damage, for the reason that they fall into the hands of the first detachment of the defensive leucocytes that comes along.

Tuberculosis is in reality a symptom of a condition, of certain physical changes, of deterioration taking place in the organism, laying it open to a successful attack of the enemy. In its treatment our first efforts should be directed to the removal of that condition. But as this article is already sufficiently long, I will have to defer what I have to say about treatment to a subsequent article.

T. W. WILLIAMS.

Milwaukee, Wis.

SOME CONCENTRATED HELPFULNESS.

To withdraw packing which has dried in the wound apply H_2O_2 .

Rheumatic, albuminuric, glycosuric? May be, for the stomach, which is the slave of the members, is also their tyrant.—Burggraeve.

The continued practice of preventing conception causes endometritis.

Excising a varicocele under local anesthesia, tie the upper ligature first. Then there is no pain in tying the lower.

If a plaster of Paris dressing is applied to the leg, include the foot if the patient stays in bed. Otherwise dropfoot will develop.

Fresh fruit after meals aids digestion. Stewed fruit one-half hour before breakfast is good in constipation.

So-called rheumatic pains are sometimes the lancinating pains of early tabes.

Vomiting is often caused by distention of the bladder.

A coated tongue calls for change or restriction of diet. Skin diseases yield very slowly to local treatment if the tongue is coated.

The sterilization of milk causes the coagulation of milk albumen and renders it more difficult to digest. Children fed on sterilized or boiled milk may develop scurvy. Children fed on sterilized or boiled milk are mostly constipated.

The toxins of the colon bacillus may be heated for one-half hour to 180° F. without losing or decreasing its poisonous properties.

The bacteria growing in milk take certain elements from it for their nutrition, and add their waste products, which are often poisonous.

A widely-distributed epidemic of typhoid, where numerous cases appear within a few days, has its origin mostly in the milk supply.

A child fed on sterilized milk does not increase its body-weight as much as if fed on fresh cow's milk.

Enteroclysis in scarlatina lessens thirst, reduces fever, prevents constipation, lessens toxemia and allays renal irritation.

GUSTAF F. HEINEN.

Blossburg, Pa.

No one should ignore the relations that exist between the dyspepsias and all other maladies including hypochondria.—Burggraeve.

AMONG THE BOOKS

JAMES'S "DISEASES AND DEFORMITIES OF THE FOOT."

Diseases and Deformities of the Feet; Describing the Treatment and Appliances Used by the Author. By Robert J. James, M. D., C. M., Seattle, Washington. Published by The Clinic Publishing Company, Chicago. Price \$1.00.

There are few diseases which are more common and more troublesome than those of the feet, and few about which the physician knows less. The general practitioner will find in this little book exactly the help which he needs to treat these cases—not a large mass of theoretical knowledge, but a digested resume of the most helpful facts about the foot. Among the subjects discussed are club-foot, flat-foot, hammer toe, bunions, corns and callosities, ingrowing toenail, onychia, cold feet, chilblains, neuralgia of the foot, foul swelling and sweaty feet, sprained ankle, physical culture of the feet, etc. We know of few books which are so likely to add to the doctor's revenue as this one. Here is a neglected field to which it will pay every physician to pay more attention. We advise every one of our readers to purchase this little book and use it. Address the author.

BRUCE'S "MATERIA MEDICA AND THER- APEUTICS."

Materia Medica and Therapeutics, an Introduction to the Rational Treatment of Diseases. By J. Mitchell Bruce, M. A., LL. D. (Hon.) Aberd, M. D., London. This pocket-size book, 6½x4½ inches, is in its forty-ninth thousand, and is the first

American edition with formulæ adapted to the U. S. Pharmacopeia by Prof. Oscar Oldberg of the N. W. School of Pharmacy, Chicago. Publishers, W. T. Keener & Co., 1906. \$1.75. A very recommendable book every way for lucidity, succinctness and soundness of doctrine, especially the admirable part on therapeutics. The active-principle practitioner will find all the alkaloids mentioned in the materia medica part, but no doses given, except those which even the "whole plant" advocate is forced to accept. The centers of therapeutic propaganda, the medical schools, are not yet pressed enough, as they will eventually be, by the growing peripheral influences, the young and the wide-awake old practitioners, in favor of alkaloidotherapy. When the surrounding country is taken the fortresses surrender.

ERBES'S "UNWRITTEN MEANING OF WORDS."

Unwritten Meaning of Words, by Philip H. Erbes, is a companion or further volume by the same author which we noticed in these pages in the May CLINIC of 1905. In that volume and in this the author starts, proceeds and finishes his novel, interesting, and thought suggestive ideas on the basis of Darwinian Evolution. The value, however, of the author's ideas is independent of the value of the evolutionary compound of theories. That muscular and bony development should be assumed to have a commanding influence upon the brain-nerve system in its growth and thus be a better progressive material instrument to the psychic individual is an idea peculiar to Mr. Erbes. And so is

his elaboration of the idea that the sounds of letters, consonants, and vowels, themselves and in combination, are not arbitrary, accidental or conventional symbols of thought expression, but necessary psycho-physical elaborations or creations of thought externalization of the mind. This, we think, is the author's conception and we value it highly. The only difficulty which this conception has to our thinking is, how to apply it to language generally. Much of this idea was elaborated by Heinrich Ewald in its application to the Hebrew language, years ago, and he accounted for the absence of vowels there, by assuming the consonants to be the body, while the vowels were the invisible soul which applied it to the uses of mental life. English, which is one of the newest languages in the world, may be studied in this way, apart from the crude obstinacies of its users against which the Gods contend in vain. We recommend the volume to those of our thinking readers who find it a profitable recreation to engage the mind in something else than medicine. Publishers, The Prometheus Publishing Co., Chicago, Illinois. 1905, \$1.00.

STERN'S "AUTOTOXICOSES."

The Autotoxicoes: Their Theory, Pathology and Treatment. By Heinrich Stern, Ph. M., M. D., New York, Professor of Special Medical Pathology and Therapy in the College of Physicians and Surgeons, Boston; Director of the Institute for Medical Diagnosis and Research in the City of New York; Fellow of the New York Academy of Medicine, etc. 12mo. 222 pages. Price, \$1.00, postpaid. Chicago: G. P. Engelhard & Company, 1906.

The increasing literature of the "autotoxicoes," or autotoxemia, is an encouraging sign, even though all authors do not be-

lieve in its importance as warmly as we do. We therefore welcome Dr. Stern's carefully written and instructive monograph, which gives us the present status of the question, especially from the viewpoint of the German school. We are particularly pleased to know that Dr. Stern regards himself as "far from being a doubting Thomas"—though we believe he might go farther in this direction and fare no worse.

The subject is divided into two parts: (1) Intestinal autointoxication and (2) Catabolic autointoxication. The first part is a careful resume of what is known concerning the nature and consequences of intestinal poisons. We were especially interested in the chapter on treatment. Of first importance the author places evacuation of the digestive canal, and especially of the small intestine, which he considers the seat of most toxicoses. While enemas and enteroclysis have their value, the purgative salines best meet the indications; these are better than the oily purgatives which have the disadvantage of being toxin solvents. Cholagoges, as well as remedies acting mainly on the lower bowel, he considers useless for the purpose in question.

Dr. Stern seems to have little faith in remedies designed to neutralize intestinal poisons, though we think he says too little concerning the possibility of preventing or arresting the production of such poisons. However, he says that to reach such poisons remedies must be given by the mouth, since they are inaccessible by the rectal route. Of first rank as a neutralizer of enterotoxins he places calomel. Other remedies which he suggests for this purpose are sodium sulphide, formic acid and yeast. These suggestions are interesting. His warm praise of sodium sulphide, for instance, suggests the use of calcium sulphide, as to the antiseptic value of which we have indubi-

Helas! appel tardif! la dosimetrie ne guerit pas les lesions organiques, c'est pourquoi elle cherche a les prevenir.—Burggraev.

I also have had the beginning of heart disease—where is the physician who has not?—but combated energetically.—Burggraev.

table evidence. But, again, we think he could have gone further and fared none the worse. We hope Dr. Stern will experiment with the sulphocarbolates.

The studies of catabolic autotoxicoes is very fine; the chapters dealing with the acid intoxications are timely and give a splendid working knowledge of the subject which should be invaluable to every physician. Every physician who treats diabetes and allied metabolic states should own this book. More than half of the monograph is given up to the therapy of the autointoxications, and this is another consideration which will commend it to the busy man, who while he values theory, most of all needs practical help. We take pleasure in commending it to our readers.

CORRECTION.

On page 1118 of our August number, in the book notice of "Skiascopy Without the Use of Drugs," the price should be 50 cents, as the publisher now tells us it is.

CARTER'S "DOCTORS AND THEIR WORK."

Doctors and Their Work, or Medicine, Quackery and Disease, by R. B. Carter, F. R. C. S. London, Smith Ellis & Co. Price, 6 shillings, 1903.

A book of excellent and uncommonly good common-sense. The author speaks from the experience of a long practice and evidently is animated by a sincere desire to aid by it his younger and older confreres. It is written in a very attractive style and cannot fail to please and instruct teachers, learners and practitioners of medicine.

The subjects discussed are: (1) Medical Student's Preliminary Education; (2) Professional Education; (3) Medical Designations (a very informing chapter!); (4) Aims

of Medicine; (5) Wishes of the Patient; (6, Medical Grievances; (7, 8) Antis, Quacks, and Quackery; (9) Professional Eminence; (10) Specialism; (11) Speech and Silence; (12) Medical Etiquette (ethics); (13) Doctors and the Insane; (14) Medical Women. In all these there is a good deal of instructive medical history.

KEMPER'S "WORLD'S GREAT ANATOMISTS."

P. Blakiston's Son & Co. have issued a small booklet entitled, "The World's Great Anatomists," containing brief biographic sketches of the great anatomists, from Galen to the present day, with eleven illustrations. The book is compiled by G. W. H. Kemper and is of singular value to those interested in medical history. The price is 50 cents.

KING'S "PERJURY FOR PAY."

Perjury for Pay, An Expose of the Methods and Criminal Cunning of the Modern Malingerer, by Willis P. King, M. D., Ex-Assistant Chief Surgeon of the Missouri Pacific Railway System.

The book will be useful for lawyers and medical witnesses, and since the author is now an "ex" surgeon of a great corporation, he may be better believed to be impartial than he could if he were still in its actual service. "Criminal cunning" is the vice of corporations nowadays, as it is that of the malingerer.

Publishers, The Burton Company, Kansas City, Mo., 1906, \$2.00.

BOVEE'S PRACTICE OF GYNECOLOGY.

Practice of Gynecology, in original contributions by American authors, edited by

Physicians attempt to make the lean fat or the fat lean without any clear conception of what they are doing.—Von Noorden.

Royal Arcanum's expenses for 1905 were \$200,000; those of the N. Y. Mutual with double the insurance in force about \$17,000,000.

J. Wesley Bovee of the Washington University, Washington, D. C. Illustrated with 382 engravings and sixty full page plates. Associated in this extensive and almost exhaustive work are Professors Goffe of the New York Polyclinic Medical School and Hospital; G. B. Miller of the Emergency Hospital, Washington, D. C.; Prof. G. H. Noble of the Atlanta School of Medicine; Dr. R. R. Schenck, late Professor in Johns Hopkins University; Professor T. J. Watkins of the Northwestern University, Chicago; and Prof. F. O. Werder of Western University of Pennsylvania.

These eminent gynecologists divided among them the labors of this monumental work, which is both encyclopedic and monographic. It is a work of reference and study which has not many equals. Editors, authors, and publishers, seem to have worked on this book of 836 pages without regard to expense of time, space and labor, and successfully. Two companion volumes are to follow this one, on Obstetrics and Pediatrics, the three volumes forming a part of Lea Brothers & Co's. Practitioners' Library. Philadelphia, 1906, \$6.00.

McCRUDDEN'S "URIC ACID."

Uric Acid; Its Chemistry, Physiology, and Pathology, and the Physiologically Important Purin Bodies, with a discussion of the Metabolism in Gout, by Francis H. McCrudden of the Laboratory of Physiological Chemistry, Harvard Medical School. Publishers, Paul B. Hoeber, New York and Leipzig, 1900, \$2.00 in paper cover, and \$3.00 in canvas.

The work is most thoroughly chemical, of most recent date. Its bearing on therapeutics is not great. The author disputes scientifically enough the overdrawn theories of Haig about uric acid, which, however,

There is always danger in individualizing, for we may lose sight of the broad principles that govern therapy.—Von Noorden.

became in its time an easy article of faith in the "credo" of many physicians. Be that as it may, the depurative treatment of gout remains.

THORINGTON'S "OPHTHALMOSCOPE."

The Ophthalmoscope, and how to use it, by Prof. James Thorington, of the Philadelphia Polyclinic and College for Graduates in Medicine.

The book is written for neither optician nor oculist, nor for those who profess to diagnose diseases "intuitionally" by looking or staring into a human eye. It is written and well written, for the plodding student and the plodding general practitioner who continues student after graduation, till he either dies or retires from practice. Such an one knows that one can often diagnose diseases of the body from that window of the soul, the human eye. For just such an one Thorington has written a little book, clearly and cleanly printed, and profusely and well illustrated in prints and colors. Publishers, P. Blakiston's Son & Co., Philadelphia, 1906. \$2.50.

CHICAGO HEALTH REPORT.

The Biennial Report of the Department of Health of the City of Chicago, for the years 1904-1905, by Charles J. Whalen, M. D., Commissioner of Health, is a record well executed and is full of encouragement as to what can be done and is being done for the health of a city of more than two millions of a most heterogeneous population from all parts of the known world. Chicago, as one of the healthiest cities of the Union, is so because of its efficient Board of Health, and under Providence because of its abundance of water and the generally good and sufficient food its working people can afford to procure.

We must know what we try to combat, why we are combating it, and what we expect to accomplish by our procedures.—Von Noorden.

CONDENSED QUERIES ANSWERED

PLEASE NOTE.

While the editors make replies to these queries as they are able, they are very far from wishing to monopolize the stage and would be pleased to hear from any reader who can furnish further and better information. Moreover, we would urge those seeking advice to report the results, whether good or bad. In all cases please give the number of the query when writing anything concerning it. Positively no attention paid to anonymous letters.

ANSWERS TO QUERIES

ANSWER TO QUERY 5069.—In reading the August issue of *CLINICAL MEDICINE*, I find on page 1124, under Query 5069, your advice as to the use of thiosinamin for the removal of scar tissue. I have universally good results in using this preparation for the removal of scars, by using it cataphorically, the solution being as follows:

Thiosinamin	dr. 1
Glycerin	drs. 2
Water	drs. 6
Sod. chlor.	grs. 5

M. Saturate a piece of absorbent lint the size of the scar and apply over it the positive pole of a galvanic current. The electrode used is preferably composed of pure tin or platinum.

C. S. NEISWANGER.

Chicago, Ill.

ANSWER TO QUERY 5069.—“Fishworm Oil, Mosquitoes, etc.” On page 1124 of *THE AMERICAN JOURNAL OF CLINICAL MEDICINE* W. J. S. of Kansas asks about angleworm oil, and the editor confesses to ignorance of the oil, and knows of no literature on the subject. This brings to my mind a little incident of more than forty years ago in which this “remedy” from the musty therapeutics of the past played a part. It was during the great war, soon after the Shiloh battle, and I, then a small boy, was the patient. In this locality doctors could not be had at that time. I had sustained a serious injury in my right arm while hunting rabbits in the swamps. The arm could not be straightened, and an old lady who was known at that time as a very “knowing woman” said “the leaders were drawn,” and nothing but fishworm oil would cure me. She had a half-pint bottle filled with angleworms and put in a “pone” of corn bread and baked several hours. A substance re-

sembling oil very much was the result. Some one else recommended the fresh, warm brains of a woodchuck well rubbed on. Many other “remedies” were applied, but none did any good. The arm never straightened. This valuable (?) contribution to therapeutics had long since escaped my memory. Reading the article above referred to reminded me of it. I think this must be the fishworm oil. If it is not I am at loss to find a name for it. It seems that many years ago it was a favorite remedy for “drawn” leaders. It is a relic of the age of musty therapeutics.

I am glad to see that Dr. A. R. Hollman of Vera Cruz, like Dr. A. C. Gore of Mississippi and a few others, is not willing to turn over yellow fever bodily to the mosquito. The time will come when those of us who agree with Dr. Hollman will not feel so lonely as now. The great majority is not always right.

When a man like Dr. Lanphear, page 1062, who has operated successfully a thousand times for appendicitis, writes on the medical treatment of that disease, his article should be and will be read with a great deal of interest. I am glad to see such articles from such men. In country practice there are many cases where one cannot operate with any promise of success. I have known more people die after operation than without it. Still I know an operation is often necessary. What to do when we cannot operate is what many of us need to know.

Think seriously about what Dr. Waugh says on page 1022, when you have a bad case of typhoid fever or fever resembling it. Follow the plans he outlines and you will not have many very bad cases.

C. KENDRICK.

Kendrick, Miss.

QUERIES.

QUERY 5084.—“Orchitis or Cancer?” I have a patient, a young man 24 years old; he had syphilis about three years ago. While building a barn, six weeks ago, he fell astraddle of one of the joists and mashed or bruised his right testicle. He consulted me three weeks afterward, after it had swollen to the size of a large goose egg. I treated him for it, and told him to report to me again in one or two days; but he did not, but went to another doctor who, he said, treated him. So today he again returned to me and now his right testicle is about the size of an oyster can and about as long as the can and as hard as a rock, seemingly. It is not less than 12 or 14 inches in length, and I don't know how to treat the case. Will you please help me out in his case at once, as he is suffering untold agonies with pains extending from it up into his body on the right side. I have never seen anything like it before.

L. W. M., Tennessee.

Now, Doctor, it is a question whether this testicle ought not to be removed promptly. You do not give us sufficient data, however, for us to be positive of this fact. If you have a simple orchitis, one of the best things you can do is to make an ointment of guaiacol, two fluid drams, lanolin, one ounce; and apply with massage, then apply a layer on cotton which keep in place with a suspensory bandage. Renew daily. Or you may use mercurial ointment, two drams, belladonna ointment, two drams, ichthyol, two drams, and lanolin, two drams; or you may alternate the two with advantage. Give salines freely after giving blue mass and soda one grain half-hourly for six doses, and then give pilocarpine, one granule, until profuse diaphoresis is obtained. Control pain with the acetanilid compound tablet, giving one half-hourly or hourly “to effect.” Codeine may be used if the acetanilid in ordinary doses fails to relieve pain. Every hour aconitine, veratrine and cicutine, one

granule of each, until temperature fails. Phytolaccin may be added (three granules) to each dose and after the aconitine, etc., is dropped push the phytolaccin, three granules every two hours. If there is any sign of pus formation calcium sulphide, 1-3 of a grain hourly to saturation. Watch this case very carefully, keep your patient in bed, give light diet, hot enemas, and on the first sign of breaking down of testicle castrate. You may even now have cancer.—Ed.

QUERY 5085.—“Test for Hyperchlorhydria.” In your next number please give a simple method of determining whether there is hyperchlorhydria.

A. P. M., Alabama.

The clinical evidences of hyperchlorhydria are pain in the stomach coming on from one to three hours after eating; this pain is relieved by taking alkalies (as bicarbonate of soda) and by nitrogenous food. Emphasize these points: Pain some time after eating—not immediately after; *more* food relieves and does not aggravate it; alkalies give relief.

Positive proof is obtained by chemical examination of the stomach contents after a test meal. The simplest meal (Ewald-Boas) consists of a dry roll or a piece of wheat bread taken on an empty stomach with a glass of water or a cup of weak tea without sugar or cream. After an hour the contents of the stomach are withdrawn with the stomach tube. Filter the liquid carefully and measure out 10 Cc. of it into a glass beaker. Add two or three drops of a 0.5 per cent solution of dimethyl-amido-azo-benzol solution, which will color the filtrate a bright red. Now from a graduated burette drop slowly, drop by drop, into the beaker decinormal solution of sodium hydrate (get this ready for use, with the coloring agent or “indica-

In the whole field of diet-therapy one-sidedness and narrowness are nowhere more pronounced than in reduction cures.—Von Noorden.

Obesity: Feasibility, success, the patient's well-being and his very life may depend on our choice of method.—Von Noorden.

tor," from a reliable chemical supply house). Meanwhile agitate the beaker and just as soon as the red color fades, stop adding the NaOH solution and note carefully just how much of it has been used. If 6 Cc. of the NaOH has been used to neutralize 10 parts of the filtrate 60 parts would be required to neutralize 100 parts. To express this in percentages multiply this by .00365, the quantity (in grams) of HCl in a corresponding decinormal solution of the acid. The stomach normally contains during digestion from 0.1 to 0.2 per cent hydrochloric acid. More than this, for the average person, means hyperchlorhydria.—Ed.

QUERY 5086.—"Aconitine and Digitalis." Footnote, page 1112, August issue, concerning aconitine and digitalis leaves. Will you oblige me by stating the source of your information, and if possible, advise as to where I can obtain information concerning the cultivation of these and other drugs.

A. A. G., New York.

If you look in any druggists' journal you will find that English aconite and digitalis leaves are quoted at \$1.25 per pound, which comes to about \$2,500 for a short ton of 2,000 pounds. Digitalis cultivated in America brings a much smaller price and is not worth anything at all. But this drug grows wild in the state of Washington, whose climate closely resembles that of England. The native aconite grows in Montana where it gives trouble to the stock man. It is stronger than the English aconite but no use is made of it. It seems likely that the cultivation or collection of either of these plants should be profitable, and we should be very glad if some one who has time and energy to spare would take up the matter.

The Bureau of Agriculture issues a pamphlet calling attention to the high monetary value of a number of our common weeds. Even at seven cents a pound burdock root

brings \$140 a ton, and it is certainly not difficult to cultivate.—Ed.

QUERY 5087.—"Intermittent Hepatic Fever." As you know, "intermittent hepatic fever" is the term used by Osler, or one of the terms, to describe recurring attacks of chronic catarrhal angiocholitis with incomplete obstruction of the duct. If it is not asking too much, kindly give me some light on this subject and describe treatment.

W. M. H., Pennsylvania.

The treatment is practically the same as for ordinary gallstones. The bowels should be kept clear by a morning saline laxative, and the sodium succinate administered in five-grain doses four times a day. The exact action of this remedy is not known, but under its use the symptoms gradually subside and so, long before the expiration of the year during which the patient should take this remedy, all evidences of the disease will have subsided. I am speaking from an experience of twenty-five years without a single failure.

The paroxysms of pain are best treated by a combination of glonoin and hyoscyamine, gr. 1-250 each, with strychnine arsenate, gr. 1-134, taken together and repeated every ten minutes until dryness of the mouth indicates their effect. Should the pain resist this treatment a mere whiff of chloroform will suffice to give relief. We always advise physicians if the relief ensuing is not decided and permanent for the time to have recourse to surgical intervention, believing that this indicates the presence of a mechanical condition which requires mechanical means. Dioscorein has also been used with much advantage as a means of relieving the pain, while in France boldine has been so widely praised as a remedy for this condition that we usually advise this in the intervals in doses of gr. 1-67 seven times a day in addition to the sodium succinate.—Ed.

As the vital energies begin to fail, men feel the effects of excessive obesity more than at earlier periods.—Von Noorden.

Obesity: Reduction cures in a subject of senile decay will never more lead to rejuvenation of the body.—Von Noorden.

QUERY 5088.—“Gray Hair.” A short time ago, I noticed an advertisement, in a hypnotic journal, from some doctor in Nebraska, saying that while treating an old lady, whose hair was white, her hair soon commenced to change color, and this change continued until it became a “nice, glossy black;” says the medicine he was giving did this—says he was surprised, and he experimented until he found it a sure thing. Says the medicine is entirely safe and can be had at any drugstore and that he will furnish the formula for this safe and wonderful hair-dye, to anyone for the sum of \$2.50.

Being curious to know if such a thing could be, and my hair turning gray a little faster than I liked, I sent for the receipt. When it came, I discovered that the principal thing in it was fluid extract jaborandi. To follow his directions, you would take 20 drops of fl. ex. jaborandi three times daily. It occurred to me that 20 drops of fl. ex. j. taken three times daily for from six weeks to two or three months, would not be healthy, so I am not taking it. Now I want to know the probable effect 15 to 20 drops of this medicine would have upon a person, taken this long, six weeks to two or three months; if it would not be dangerous to health.

P. R., Oklahoma.

That jaborandi taken internally has the power of sometimes restoring its color to gray hair, has long been known. In fact, you may read it in Shoemaker's Text-Book on Therapeutics. Whatever else this man's formula contains, it is undoubtedly the jaborandi which does the work.

As to what would be the effect of taking a dram daily of fl. ex. of jaborandi, primarily it would depend upon whether jaborine or pilocarpine predominated. If the first, we would have much the same effect that would ensue after taking full doses of atropine. I have had cases of mental depression approximating, if not actually reaching homicidal insanity resulting from the continued administration of fl. ex. of jaborandi, in doses even smaller than those recommended. In one case the woman who was taking it

to increase the secretion of milk was sensible of the effect, and asked me to have her confined in an asylum, as she acknowledged that the impulse to kill her husband with an axe was getting beyond her control. No disagreement existed between her husband and herself, they being devotedly attached to each other. She recovered promptly when the jaborandi was discontinued. The other case was very similar.

For those reasons I do not believe that one should take this drug unless under the constant observation of a physician, not the patient himself. I attributed this result to the jaborandi, first because I have never observed it in numerous cases where I have given pilocarpine to full physiologic effect, continuously; and secondly, because jaborine belongs to the atropine group and these are well recognized to be productive of delirium.

Great Scott, Doctor! Is it possible that a man of your prominence and standing in the profession would pay for a thing so well known that it is found in the common text-books of therapeutics? Why, Doctor, if that is the case you can send us a check for five thousand dollars, and we will agree to supply you with so many such useful hints that you will say it is a cheaper investment than the one you made in this case. The “Text-Book of Alkaloidal Therapeutics” is alone worth that much money to you; in fact, on page 326 you will find the suggestion for which you paid, and under it a more important fact, that pilocarpine sometimes cures deafness, a much more serious trouble than the premature grayness.—Ed.

QUERY 5089.—“Sodium Succinate and Renal Calculi.” Is sodium succinate ever used in nephritic stones? Could feelings of faintness and heart-depression come from its use three times a day, as advised for gall-stones?

F. J. M., Nebraska.

Reduction cures in old persons almost without exception lead to rapid loss of strength and functional decay.—Von Noorden.

If fat increases rapidly, or slowly but steadily, a mode of life should be arranged to arrest this development.—Von Noorden.

No, Doctor, sodium succinate is not of any service in renal calculi. The composition of the calculus must be determined by analysis of urine and, if possible, examination of the concretion itself, and then the proper remedies exhibited, phosphatic deposits calling for entirely different treatment from uric-acid deposits. We do not know that sodium succinate has ever caused cardiac depression. However, in some conditions sodium salts of any kind may prove somewhat depressant. The dosage, however, recommended for gallstones could hardly act in this way. Reduce the dosage or stop the drug for a day or two and note whether the symptoms improve. It is rather an interesting question and we trust you may be able to shed some light upon it.—Ed.

QUERY 5090.—“Mastitis.” I have a bad case of mastitis on hand which I wish you would advise me on. I have opened one abscess and will open another tomorrow. What is the best treatment to reduce and remove the “cake” from the breast?

J. B., Indian Territory.

An ointment of pulv. phytolacca rad., dr. 1; camphoræ, gr. 10; ext. belladonna, dr. 1; ungt. zinc ox. benzoat. oz. 1, is the best thing we know of. Evacuate any pus that has formed; irrigate with H_2O_2 and then with creolin solution (2 per cent). Be sure that you evacuate all pockets. After a thorough cleaning, pack with a good antiseptic gauze (bismuth-formic-iodide, Mulford, has given us the best satisfaction) and apply pressure. After the condition has been controlled reduce induration with a compress soaked in ammon. chlor. oz. 1; spt. rosemary, one pint. Internally give calcium sulphide, gr. 1-6, every hour, and phytolaccin and echinacea one each every two hours. Salines daily after an early evacuation of bowels with calomel and podophyllin, aa gr. 1-6, and iridin, gr. 1-6, hourly for six

doses at night. Triple arsenates with nuclein, two after each meal, and a nourishing diet.—Ed.

QUERY 5091.—“Mammary Abscess.” Mrs. G., aged 25, two children. With first child her breast was sore and was exceedingly bad—a large abscess which was packed daily with cotton; finally it did heal in about twelve months. I was not the attendant. It did not remain healed. A small opening comes back and it discharges a little pus. She says it has a peculiar feeling as if something was in there, yet no lumps, no enlarged glands. This opening is situated near the nipple back to one side about two inches. Could it be possible some cotton was left in this abscess or why should it not heal? Advise me what to do with this. No need to apply powders and salines or washes, for it will not heal. Not much pus but just a little to prevent healing.

J. E. H., Texas.

Is there any tendency to tuberculosis or possibility of specific infection? We should strongly suggest that you make a free incision, look for any foreign body, irrigate with peroxide of hydrogen, then flush with a boric acid or a weak creolin solution (30 drops to the pint), trim out the walls of the sinus and scrape any cavities or fistulous tracts, then pack with iodoform gauze soaked with bovine; change the dressing twice daily, cleansing each time thoroughly with a spray of boric acid solution and heal up thus from the bottom. Internally give the antiscorbutic granule, two, three times daily, calcium sulphide, gr. 1-6, six times daily and two triple arsenates after meals. A saline each morning will probably be helpful as would salt sponge baths and a nutritious diet.—Ed.

QUERY 5092.—“Caulophyllin in ‘Rigid Os.’” In the June issue of the JOURNAL Dr. J. A. Burnett has an article on “Caulophyllin.” He mentions, among other therapeutic uses, its power to “relax the parts”

There is no objection by beginning treatment of obesity by a quick reduction of 10 to 15 lbs., then slower.—Von Noorden.

Van Gieson, studying 805 sunstrokes, holds the not improbable view that the immediate basis is autotoxic, heat only aiding.—Anders.

in labor and to increase true labor pains. Sometime since I had noticed this drug recommended for these uses, and have tried it in at least forty cases to dilate the os and to stimulate uterine contractions and in no case have I ever seen it do either, though I have used it in dose recommended and increased it to two or three times the amount. I wrote to Dr. Burnett asking him how he got the results as above mentioned and he referred the letter to you. You say you do not know that it has been advised for "increasing labor pains." Dr. Burnett states it will twice in his article and in "Alkaloidal Therapeutics," on page 135, you will find this statement: "During labor it relieves false pains and coordinates true ones, increasing their force. It is a better oxytocic than ergot, stimulating normal contractions instead of inducing spasmodic action." On page 136 it is said: "It is given every ten minutes until labor pains become sufficient." On this same page is mentioned its power to dilate the os. It is not my object to discredit the real therapeutic uses of this drug; but as I have several times seen these uses attributed to it and believe I have fairly and thoroughly tested it I wanted to find out from some one who had obtained these results from it *why* I have not. From my experience with it I do not believe it will increase true labor pains or dilate the os in labor. I do not care to establish my belief but to get at the real truth as to its therapeutic value.

W. J. S., Kentucky.

Caulophyllin has been recommended by us for years and years in "rigid os." It is the most remarkable agent in this condition that we possess. Hundreds and hundreds of physicians have reported their success with caulophyllin and only a few days ago a local physician told us that he had used it in five cases within the last two years with prompt improvement in each instance. The action of this drug is understood thoroughly, but unfortunately various men have advanced various ideas and it has been used where it was not indicated at all. Caulophyllin is, first and foremost, an *antispas-*

modic, the drug exerting a specific influence upon the reproductive organs of the female. The action of the drug must of course vary according to the condition of the patient, but two or three granules of caulophyllin given with a little hot water every fifteen minutes will speedily cause a rigid os to soften and dilate and by sedating the nerve centers will relieve spasm, allowing normal circulation to obtain, hence, in this way, *facilitating* true pains and *dispelling* false ones.

Now, Doctor, there is no question as to the efficacy of caulophyllin. If there is an abnormal condition of the uterus—spasm, unequal circulation, disturbed innervation, etc., a few doses of caulophyllin will speedily produce a change for the better; but if normal conditions prevail as regards circulation, etc., and the os is merely extremely small and muscular caulophyllin is not going to exert any very great influence. You will readily see why it is possible for a man to give caulophyllin in the wrong cases and fail to secure results and you will also note that the drug if given in the proper conditions will prove just the specific it is said to be. The writer uses caulophyllin extensively and is fully familiar with its remarkable antispasmodic and decongestive action. Try it again, Doctor, with this light upon the subject and report later. We shall be pleased to hear from you.—Ed.

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QUERY 5093.—"An Obscure Disorder: Diagnosis Wanted." I wish to give you the symptoms of a case and you in return give me the diagnosis, prognosis and treatment. Mrs. H., age 42, looks to be in good health, weighing about 170 pounds. Has partial loss of power of lower limbs. About two years ago she was confined to her bed for a few weeks. It was here our trouble began. She was paralyzed in her lower limbs and was in a helpless condition for several weeks, but gradually got better, but for the last year

Cutter in the *Dietetic Gazette* energetically protests against the universal denouncing of meat diet. Is he in the Trust?

If hernia coexists with frequent urination there is a possibility that the bladder enters the hernial sac.—*Am. Jour. Surg.*

has stood about the same. She has vesical disturbance, at times can't urinate. She looks like a woman about seven months' pregnant, constipated, and complains of pains in the back and lower limbs, as she describes them, of a cramping nature. Exaggerated knee-jerk and a slight spastic gait. I have begun treating her by "cleaning her out and keeping her clean." Silver nitrate, gr. 1-2 three times a day. Faradism to spine and lower limbs, cold bath to spine and lower limbs with plenty of rubbing with coarse towel. Now help me. If there is anything that can be done I want to do it for this patient.

W. S. W., Missouri.

It is an impossibility for us to formulate a positive diagnosis from the few facts you give us. Make a careful physical examination, Doctor. See whether the paralysis of the lower limbs is not due to pressure from abdominal tumor. The question is, have you cleaned her out or only succeeded in partially emptying the bowel? We would place this woman in the knee-chest position and slowly insert two quarts of warm soap suds above the sigmoid flexure, using a colon tube, then we would give her one of the "diuretic and laxative tonic" granules three or four times daily and a saline draught before breakfast each morning with strychnine and phos. comp. and lecithin, one of each, about thirty minutes prior to food. There may be, of course, some disease of the cord. You will have to test this by carefully estimating the various reflexes, deep and superficial, and noting areas of anesthesia, hyperesthesia, etc. Describe condition of tongue, liver (size), stomach (size and position) and heart. Note ocular reflexes, activity and color of skin, wasting of muscles, if any, and generally present a brief but clear clinical picture, sending four ounces of urine from the entire twenty-four hour output, stating amount passed. Then we can aid you intelligently.—ED.

A mass protruding from an infant's bowels may be an intussusception and not a mere prolapse.—*Amer. Jour. Surg.*

QUERY 5094.—"Treatment of Pterygium." Do you know of any internal or local preparation that will stop or modify the growth of a pterygium in its early stage. If you have will you send it or make me acquainted with same. Will thank you for a reply.

D. D. H., Colorado.

All the authors advise operation and operation only. Even then it is quite probably that the growth will return. Simple ablation is followed by recurrence in a very large percentage of cases. The growth is grasped near the corneal margin with a rat-tooth forceps, raised up and a cataract knife inserted beneath it. With a few strokes of the knife the growth is shaved off the cornea. The body of the pterygium is then divided by two snips of the scissors near the caruncle, one above and one below. This V-shaped incision is then sutured. Deschamps advises that the cornea should be scraped or area of attachment cauterized with the actual cautery or carbolic acid. There is no dressing needed unless the eye becomes infected and pus forms, when a boric solution (ten grains to the ounce) may be used to bathe the eye. Hobby's operation and McRunnel's are also excellent. For technic, etc., see De Schweinitz, or Gibbons, "The Eye and Its Diseases," Macmillan Company publishers, price five dollars. This is an excellent work and should be on the shelf of every man doing any eye work. Now let the writer give one of his own ideas. In the early stages he believes that adrenalin chloride solution used freely and constantly would put an end to pterygium. Suppose you try it, Doctor, and let us know the result.—ED.

QUERY 5095.—"Wanted: A Tablet Cure For Snake-bite: Echinacea?" A doctor told me yesterday (after it was too late for me to save the life of my patient with whisky, it being so far to a place where it could be had that the child died before the man got

A palm tree will support an Arab, his wife and donkey, the latter eating the stones. Livingston dined on three dates.—Cutter.

back with it) that there was a tablet to cure snake-bite. If there is such a tablet as he said I do not want to be without them all through the warm weather, for there are very many large and poisonous snakes in this country. They give me much trouble.

J. M. C., Texas.

Many tablets could be carried (and used, we presume) in snake bite, but there is no tablet which represents whisky. *Echinacea angustifolia* is, however, obtainable in tablet form and can be exhibited to patients bitten by venomous serpents with good results. At the same time a solution of echinacea should be applied to the wound after free excision or cauterization of the part. You simply state that some physician told you after some child had died that he carried a tablet to use in snake-bites. Now, many remedies have been suggested for the bite of snake. Potassium permanganate can be procured in tablet form and this is often injected into the tissues with good results.

The Indians have used echinacea for many years in snake bite. This drug is also known as black sampson, cone flower, purple flower, etc. In 1871 Dr. Meyer recommended the use of this remedy. The Sioux Indians scrape the root and give freely, also binding the scraped roots upon the parts bitten. Recovery from the bite of the rattlesnake takes place in from two to twelve hours. One physician gives a history of 613 cases of rattlesnake bite successfully treated with echinacea. This man injected the venom of the rattlesnake into the first finger of his left hand. In six hours the arm was swollen to the elbow and black. At this time he took a full dose of echinacea, bathed the parts thoroughly with the solution and laid down to sleep. Six hours later all pain and swelling had disappeared. Lloyd Brothers of Cincinnati make a specific tincture of echinacea and a stronger preparation called echifalta. Still more convenient are the

tablets or granules (which can be carried always) containing 1-2 grain of powdered extract, representing about ten minims of the specific tincture.—ED.

QUERY 5096.—“A Case of Pseudo-Leukemia.” Pseudo-leukemia of three years' standing. A woman of 35 years, involving glands of the neck to such an extent as to interfere with the swallowing of solid food; bilateral, very painful. Have used iron, arsenic and the x-rays with no good effects. Can you suggest anything further in treatment?

L. B. D., North Dakota.

Allow us to suggest that you inject fifteen to thirty minims (hypodermically) daily of the following formula: sodium cacodylate, 25 grains; cocaine hydrochloride, 1-2 grain; sodium chloride, one grain; distilled water to make one fluid ounce. At the same time, Doctor, give berberine two to three granules and phytolaccin three between meals and half an hour before eating ten minims of nuclein dropped on or under the tongue and absorbed from the buccal mucosa. With food, which should be of a light, nutritious and fluid character, give one dram of sanguiferin and for one week arsenic iodide, gr. 1-67 after food, t. i. d. Drop this after a week, for one week, and repeat. Keep the skin freely open with salt sponge baths; have the patient practically live in the open air, and you will have done all that can be done for the case.—ED.

QUERY 5097.—“Varicose Ulcer of Leg.” Woman, 45 years old, fleshy and nervous, light complexion, has a varicose ulcer over tibia on left leg of about two years' standing. Ulcer was about one inch in diameter but has been reduced to about one-half inch, where it remains stationary. Patient has a good appetite, bowels move regularly, urine normal in amount and constituents. Family history good. I wash the ulcer every forty-eight hours with bichloride, 1 to 1000, then

Inventive genius is by no means unknown among American women. Tell us about its medical manifestations, please.

Next to the home—the most frequent source of consumption is to be found in the workshop.—Landis, *Jour. Outdoor Life*.

with peroxide, and dust with vitogen, and apply one layer of gauze, a pad of absorbent cotton and strap this to the leg, using overlapping strips of adhesive plaster, being careful to apply plaster so that tension on ulcer is removed. I then bandage snugly with gauze roller bandage from toes to about three inches above ulcer. At every third dressing I apply a pad saturated with bovine and covered with oiled silk and allow it to remain in place for forty-eight hours. Can you suggest anything that will help the treatment?

J. M. D.

Varicose ulcer of the leg is easily cured if you know just how to do it. Cleanse thoroughly with H_2O_2 ; cut away or curet any necrotic tissue or sloughing floor; then apply pure turpentine (Merck) with a camelshair brush; snugly fit into the ulcer a piece of gauze saturated with turpentine, cover with another pad of gauze, a handful of cotton and a snug bandage. Repeat this dressing daily until granulation is established and the edges close in. Now, Doctor, place a few pin-point grafts upon the surface, after cleansing with boric acid solution or a normal saline (taking these "pin-point" grafts from the thigh or the arm of the patient). After placing them, flood the area with bovine, cover with a piece of rubber tissue or oiled silk perforated freely with pin holes; over this lay a piece of gauze soaked with bovine, then another piece of oiled silk (unperforated); cover and bandage in the usual manner. Dress twice daily (not removing the perforated tissue unless signs of secretion or pus are evident) and then every second day, with great care, catching one corner of it with a pair of forceps and floating it up with boric acid solution thrown under it with a dropper.

The best way of taking the skin for grafts is this: Take a long, sharp needle or a fine bistoury and just catch the skin and lift it up. Then with a pair of small scissors snip

off a little point (use the curved scissors) and lift the minute particle of skin directly onto the wound, cut side down. These should be about 1-8 inch apart and if you do the work right nine out of ten of them will live. Internally give this patient two triple arsenates with nuclein after meals and hydrastin, one granule, and juglandin two, thirty minutes before meals. Keep the bowels open with salines.—Ed.

QUERY 5098.—"Exophthalmic Goiter." I have a patient aged 30. Mother died of exophthalmic goiter at 50. This patient has enlarged thyroid, bulging eyes, rapid heart action. Is not anemic or emaciated but is beginning to tire easily and is very nervous. Kidneys normal, bowels normal, fair appetite. No anorexia nor nausea; functions normal. Eyes bulging; some lachrymation in morning. Profuse sweats at times. Diagnosis: exophthalmic goiter. Treatment: I have read a dozen text-books but am lost after reading them all. Have you any personal experience in treating this disease? Can you outline treatment with hope of success? Have ordered through druggist as a starter 500 strophanthin granules, gr. 1-134, to regulate heart. Would you use this alone or prefer any additional remedies?

A. B. F., North Dakota.

Exophthalmic goiter is not a difficult disease to treat in its early stages, but later is far from being easily controlled. Desiccated thymus is said to be useful in a few instances, but sparteine and calx iodata, with small doses of ergotin, give even better results. Eliminate, Doctor, giving calomel, gr. 1-6, podophyllin, gr. 1-6, hourly for four doses every third night and a saline the next morning before breakfast. Alternate sparteine and strophanthin (two granules) every three hours, giving calx iodata one grain with each dose or smaller doses at first. If any gastric distress is noted after each meal two triple arsenates with nuclein and every two hours throughout the day ergotin, gr.

One hundred years ago John Crawford showed malaria to be caused by mosquitoes. He was laughed out of court.—Eccles, *Diet. Gaz.*

Sixty years ago Josiah Nott defended Crawford's views as to the mosquito. He was turned down by the entire profession.—Eccles.

1-6; small doses of veratrine from time to time to sedate the pulse if too full and bounding. Picrotoxin has given good results, so also has strontium iodide, but we would rather use calx iodata. Let us know something about the patient, Doctor, as each case requires more or less individual treatment.—ED.

QUERY 5099.—“Nevi.” I have a case of nevi on the arms of a six-months’ old infant; came out after birth. Are large areas, about one and one-half or two inches across. Irregular, very red, soft like a dilated superficial vein only softer. They are raised one quarter inch above surface of integument. Have some dermal caustic, but it didn’t seem to be just the thing, and so have not used it. Would you think it appropriate for this case? I have a good electrical equipment if you think better of the needle.

A. L. S., Pennsylvania.

The only thing to do in a case of this kind is to carefully dissect out the growth. The electric needle is extremely dangerous and will probably prove unsatisfactory and chemicals are apt to set up a profuse hemorrhage. We deem this to be an arterial cavernous nevi. Begin well at the margin of the nevus and dissect out the growth, catching each vessel as it is met with hemostatic forceps. You will find as a rule the main artery feeding the tangle of vessels at the extreme bottom. Look out for it. The writer once dissected away a cavernous nevus from between the eye and nose in a child of two years and had the whole thing done except a small pedicle at the bottom of the growth. Upon severing this a stream of arterial blood ascended into the air some four or five feet and despite every precaution the child lost a large amount of blood before we were able to plug the canal in the bone into which the vessel had retracted. Had it not been for this the operation would have been completed without the loss of a teaspoonful of

blood. In this case, of course, you will not have any arteries running into bone.—ED.

QUERY 5100.—“Is it Cholera Infantum?” Be so kind as to let me know at once what alkaloids or other medicine you would use in a case of cholera infantum after the acute stage is over and edema develops, face, hands, feet and whole body swollen? I have lost one case and have another on my hands. A body that weighs twenty pounds gets to weighing thirty or more pounds. Could giving atropine to check the watery stools cause it?

C. S. E., North Carolina.

We fear that you haven’t true cholera infantum to treat here. In cholera infantum there is anything but edema. “Face, hands, feet and whole body swelling” is certainly not a picture of a cholera infantum case. Cotton’s recent book, “Diseases of Infancy and Childhood” (an excellent work it is, by the way) says: “From the first the prostration is profound *with rapid emaciation*, so that in a few hours a plump infant will show the pinched, pallid features, lusterless, sunken eyes, drawn mouth, depressed fontanelle and over-riding bones of profound collapse. The extremities are shrunken, cold and corpse-like, the abdomen becomes flattened and death may occur within twenty-four hours; occasionally death is postponed for two or three days, rarely a case recovers.” The intense drainage from the tissues would absolutely prevent edema. We fear you have an acute nephritis, which *might* complicate intestinal disorder but rarely has time to advance in cholera infantum, though postmortem the kidneys almost always show degenerative changes. Cholera infantum will reduce a thirty-pound child to twenty or below, but will certainly never cause a twenty-pound child to weigh thirty pounds. The writer has from time to time written articles upon the treatment of this disease and the summer diarrheas of infants and if

In 1883 King in *Pop. Sci. Mo.* advanced the mosquito theory, but the profession remained deaf, dumb and blind.—Eccles.

Europeans had to awaken American medicine to knowledge of their leaders’ idiocy as to the mosquito theory.—Eccles, *Diet. Gas.*

you will follow the course of articles now appearing in the *JOURNAL*, "The Acute Diseases of Children," you will find much to interest you.

Atropine, of course, should not be given in too large doses, as its effect is prompt, and potent, but it certainly could not cause the condition you describe. Unfortunately, Doctor, you do not even give us the faintest idea as to physical condition outside the one phenomenon, dropsy, and it is a question whether this *is* dropsy proper. What is the temperature, condition of tongue, state of stools, amount of urine passed, composition of same, and are the children being fed? Give us a clinical picture and we will be more than pleased to suggest. In the meantime you had better give minute doses of barosmin with saline solution, guard the heart with cactin, massage the swollen limbs, put the child in a wet pack and give sweet spirit of niter, ten minims three times daily in a little sweetened water; one of the sulphur compound granules might be given every three or four hours until diuresis is marked and stools are watery. Beef juice, bovine or sanguiferrin to maintain vital force and nuclein hypodermically or per os in fairly full doses. Brucine or strychnine may be needed also. Let us suggest here that barley water will probably prove the best food, with albumen water. Milk will probably kill more promptly than any poison.—Ed.

QUERY 5101.—"Amebic Dysentery." You have no doubt read of amebic dysentery which is so prevalent over here. What would you advise in such cases? When amebæ get located in the intestine it becomes quite a difficult matter to get rid of them. I would be greatly interested in learning your views on this question. The routine treatment at the hospitals at the present time consists of ipecac and quinine enemas.

W. S. A., Manila, Philippine Islands.

The method of treatment usually ad-

vised, as you know, is the internal use of large doses of ipecac (fifteen to thirty grains) with rectal irrigation with quinine solution. The alkaloidal practitioner gives a grain of emetine at a dose, giving it without water, the patient to be kept absolutely quiet and not allowed to move himself, the head depressed, the feet warm, while a sinapism should be applied to the epigastrium. We would add a hypodermic of morphine. If the patient vomits after half an hour or an hour the same dosage is repeated and may be repeated the third time after longer interval until it is retained. Of course this treatment should be preceded by the usual clean-out method and the bowels thoroughly emptied both from top and bottom.

Quinine is undoubtedly the best remedy for the destruction of the ameba. It has a particularly powerful action on all low forms of life like these if it can be brought into contact with them. A sufficient use of the quinine enema given with the long tube is the thing. The main difficulty, however, is this: in amebic dysentery the parasites have a way of undermining the mucous membrane and boring beneath it in such a way that it is difficult to reach them, and, in fact, almost impossible in advanced cases. This makes the treatment in advanced cases of amebic dysentery very, very tedious and some of them are almost sure to die.

If we had a very obstinate case we would be tempted to do what we saw done by an army surgeon several years ago on a large number of patients (all soldiers, of course), a left inguinal colotomy, using the artificial anus opening to advantage for the more thorough washing out of the colon with the quinine solution.

It might be a good scheme to perform an appendectomy on all these cases and instead of closing the whole end of the cecum use it as a place through which to introduce the

Post mortems at large hospitals show that over 35 per cent of all persons have had appendicitis at some time during life.—Griswold, *Diet. Gaz.*

The profession is being rapidly resolved into surgeons, assistants, would-bes, laparotomists, and other specialists.—Griswold.

irrigating fluid. Some clever fellow suggested this some years ago for some other trouble. The writer would be inclined to use high injections of a solution of epsom salt, an ounce to the quart, adding ten minims of creolin to the pint or solutions of silver citrate (Crede). Nuclein should be exhibited in full doses hypodermically and we cannot but believe that calcium sulphide would prove efficacious in this disease.

We are now experimenting with the active principle of *Alstonia constricta*, which is said to be of extreme benefit in such diseases. Why not do a little experimenting, Doctor, and report results? You could be of great service to the profession.—ED.

QUERY 5102:—"Obstinate Periodical Hemicrania." G. M., 42 years old, has had severe headaches in back of head for twenty years, coming on once a month to six weeks with regularity, lasting from four days to one week. He has been treated by a number of physicians without any relief. Very large doses of acetanilid have given relief at times, but now do not relieve; takes from 10 to 15 grains at a dose two or three times a day till his lips, nose and ears are purple. The acetanilid does not seem to lower the pulse very much. His last attack has been for six weeks with but little intermission for a day or two at a time. He is a well-developed man, has a good appetite; during the headaches his tongue is clean and bowels regular. Urine 1025 to 1030. His wife says that at the time of headaches his breath is very bad. He sleeps well after he gets to sleep and often wakes up in the morning with the headaches.

W. E., Iowa.

We would like to have a specimen of the twenty-four hour' urine for chemical and microscopical examination and at the same time a succinct description of physical conditions generally. At this age tumor of the brain must be thought of and it would be well to have the eyes examined thoroughly. How about the reflexes? Sphincter ani? Is it possible that this is a *specific* hemi-

crania? Try this method and you will at least have an idea as to the possibility of gastric origin. Calomel, iridin and podophyllin, gr. each $\frac{1}{2}$ every hour for six doses at night; saline (in hot water) on rising the next morning. Boldine two granules, xanthoxilin, three, and iridin, two, between meals. Light diet. Papayotin, three granules and ten drops dilute hydrochloric acid in water after food. For one week give one hour later ten grains of the sulphocarbolates with water. The calomel, etc., every third night. If headache persists after one week give large doses of *passiflora incarnata* (sp. tr.) and lecithin.—ED.

QUERY 5103:—"Venereal Warts." Continuing our correspondence in regard to venereal warts in which you recommended carbenzol and asked some further information as to size and number of the warts will say the case is that of a woman who has had a specific infection with a foul discharge. The discharge is checked but warts remain. They are situated on the labia majora and minora each side up to the level about of the meatus urinarius. There are perhaps fifty of them from a small size up to the size of a lead pencil. They have been treated by applications of *thuja occidentalis* and by clipping but do not remain away.

H. L. A., Nebraska.

Apply carbenzol pure to these vegetations morning, noon and night with a camelshair brush or cotton swab, rubbing it in a little. If this does not entirely destroy the growths in a week or two it will materially effect their nutrition and will render them in better condition for final treatment with a more potent compound. Let us know in two weeks just what condition prevails and we will be pleased to serve you further. Remember that such warts are contagious. If they persist clip off the filiform growths and curet others stretching the skin and touching the base with iodine or a saturated solution of ac. salicylic.—ED.

To make solder hold, heat the article to be mended to the melting point of the solder, and they will cool together.—*Diet. Gaz.*

The Palmyra Springs Sanitarium, Wisconsin has added a female physician to its staff. A very judicious move.



SHATTERED IDOLS.

I HAVE just finished reading Miss H. Case's letter in the July number and it's good—very good, and ideal—extremely so.

The doctor—God bless him—is a mighty good man and doesn't get half the appreciation and help that's coming to him (none of us do, boo-hoo!). But Lord love you, child, when you've been married to him as many years as I have, the golden halo around his head will disappear, the romantic atmosphere with which you envelop him now will gradually evaporate and you will waken to the fact that your husband is neither saint nor demigod, but just plain every day man like Jones next door or Smith across the street! And whisper, the more you idealize him now, Casey darlint, the more heartaches you've got coming before you learn to be happy with him as he really exists! It may cost you bitter tears and lots of them to discover that your "dear patient Doctor" can slam the furnace door, or grumble at the coffee, or fire a few healthy cuss words at a refractory harness buckle, but Casey, dear, he'd be no good if he didn't and you needn't think for a minute you're going to be happy with him till you can see his faults and love him in spite of 'em!

And if some day after five years or thirty you suggest that "no matter how dark the night or how long the way" it is his "dreaming of the dear one whose heart is awake and following him through the night" that "makes the long hours short" etc., etc., ad lib., there's an awful disillusionment in store for you! I know that it's heresy to suggest that as a preparation for a cold

night drive, coffee is preferable to kisses, or that creature comforts should ever transcend psychological sympathy, but try it and see,—though you needn't forget the kisses!

Moreover, mavourneen, if you're going into a matrimonial partnership on the basis that you're always to "strengthen and comfort him, while you do not even pour your home troubles into his already full heart and head," a little lady about your size is going to run shy on sympathy in a mighty little while. Marriage to be successful must be an exchange and interchange of sympathies and interests, and while that doesn't mean that he must tell you every time Mrs. Nochildski has a miscarriage or that you must be always whining at him about Nora's inefficiency or the price of meat, it does mean that if you do not demand and receive a certain amount of interest and sympathy regarding your household business, in exchange for what you give for his professional business, you'll train that ideal of yours into a selfish cad, for whom one day you'll have unlimited contempt instead of undying love.

The doctor's life is a hard one—so is the preacher's and the lawyer's and the merchant's, and it's the duty of their wives, each and all, to help and comfort and strengthen—and theirs to return the compliment.

A DOCTOR'S WIFE.

—:O:—

Evidently from the heart of (I trust) an unusual experience. Brother Doctor, if you are "good," have sympathy! If you

are thoughtlessly "bad" won't you be good? Think a bit.—ED.

THE FAMILY JAR.

To an old, deserted dove-cote flew,
On a bright spring morning, pigeons two.
They scanned the apartments through and through,
And then they wrangled, as pigeons do,
For things didn't suit the mother bird.
And this is what a listener heard:
"Pooh! Pooh! It won't do! Too old! Too old!"
"Of course! I knew it! You're bound to scold!"
Go ahead, old girl! Go it! Go it!
What's too old?" "That nest! And you know it!
You kno-o-ow it! You lazy old thing!
Just you-u-u! Too lazy to bring
some twigs, some hair, a bit of a string,
And build a new one!" "But, say! Look here—"
"I won't! It's true! You know it!" "My dear—"
"I'm not! You know it! Just you-u-u!"
"That nest's good enough!" "Pooh! Pooh! Pooh!"
Pooh!

It isn't! You know it, too! Skiddoo!
Skiddoo-oo-oo! Twenty-three for me!
I'll never use it! You'll see! You'll see!
Sit there and chuckle! And chuckle! O!
What are you good for? I'd like to know!
You want to sit in the sun and rest!
You ought to turn in and build a nest!
You kno-o-ow it! You lazy dub!
You'll want me next to forage for grub,
While you sit and pout!"—"Old girl, please stop!
I'll hustle around and fix this shop,
I'll gather the stuff to build a nest,
And clean things up. Please give me a rest.
Great Scott! I'll do whatever you will,
But, for heaven's sake, old girl, keep still!"

This was the end of their little row—
And two fat squabs fill that new nest now.

THE RIGHT WORD IN THE RIGHT PLACE.

At last our "CLINICAL MEDICINE" (you see I already feel a part ownership) has arrived and much to my surprise and pleasure I see my maiden effort making its bow. I feel like a small boy, who once having braved certain childish terrors, is anxious to "try" again. My one hope is that with this return I do not tumble into oblivion; for before my mind's eye, grasping and relentless, looms a giant waste basket, marked "Editor's Own."

During the past I have been interested

Chez le gouteux l'asthme est l'indice d'une maladie du coeur; et les intermissions du coeur le prouvent.—Burggraeve.

in noticing the attitudes which some of my "sisters" take in speaking before others of their husband's capabilities. Many women refuse to mention, in the course of conversation, his specialties or successes. Personally, I cannot agree with these; but it would be most interesting to me to read the opinions of others who have doubtless considered this subject before. It has been my experience, that socially a doctor's helpmeet can be of great value to him, inasmuch as with tact and judgment many desirable patients may be attracted through her. As a physician once said to me: "Never lose an opportunity to speak well of your husband's achievements to your friends. It will be of inestimable value to him, and can never hurt you. To my mind it is a charming form of loyalty." His words fit in with my idea exactly.

Do not think for an instant that I believe in thrusting my opinions upon unwilling victims. By no means, but a judicious word here and there will often reap quite a harvest.

J. W. F.

—, New York.

A FEARFUL OPERATION.

Dr. Wagner put on a doleful look as he said there would be a serious operation at his house that afternoon.

"I do not suppose you will perform it," said the hardware man.

"No," said Wagner, "it is too difficult for me,"—an admission that he rarely made in public. "What is the nature of it?" said the hardware man. "Well, sir," said the doctor, "my wife is going to have her kimono cut out." "What is that?" said the hardware man. "Why it is something that covers no part of the body, and touches nowhere."—R. W. Payne.

L'état grasseyeux du coeur, en effet, n'a pas de signes suffisamment évidents pour permettre un diagnostic certain.—Peter.